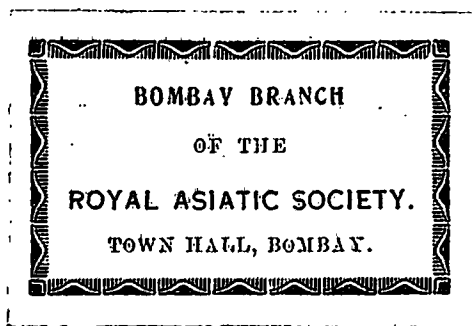




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THE
NATURAL HISTORY
OF
B I R D S.

FROM THE FRENCH OF THE
COUNT DE BUFFON.

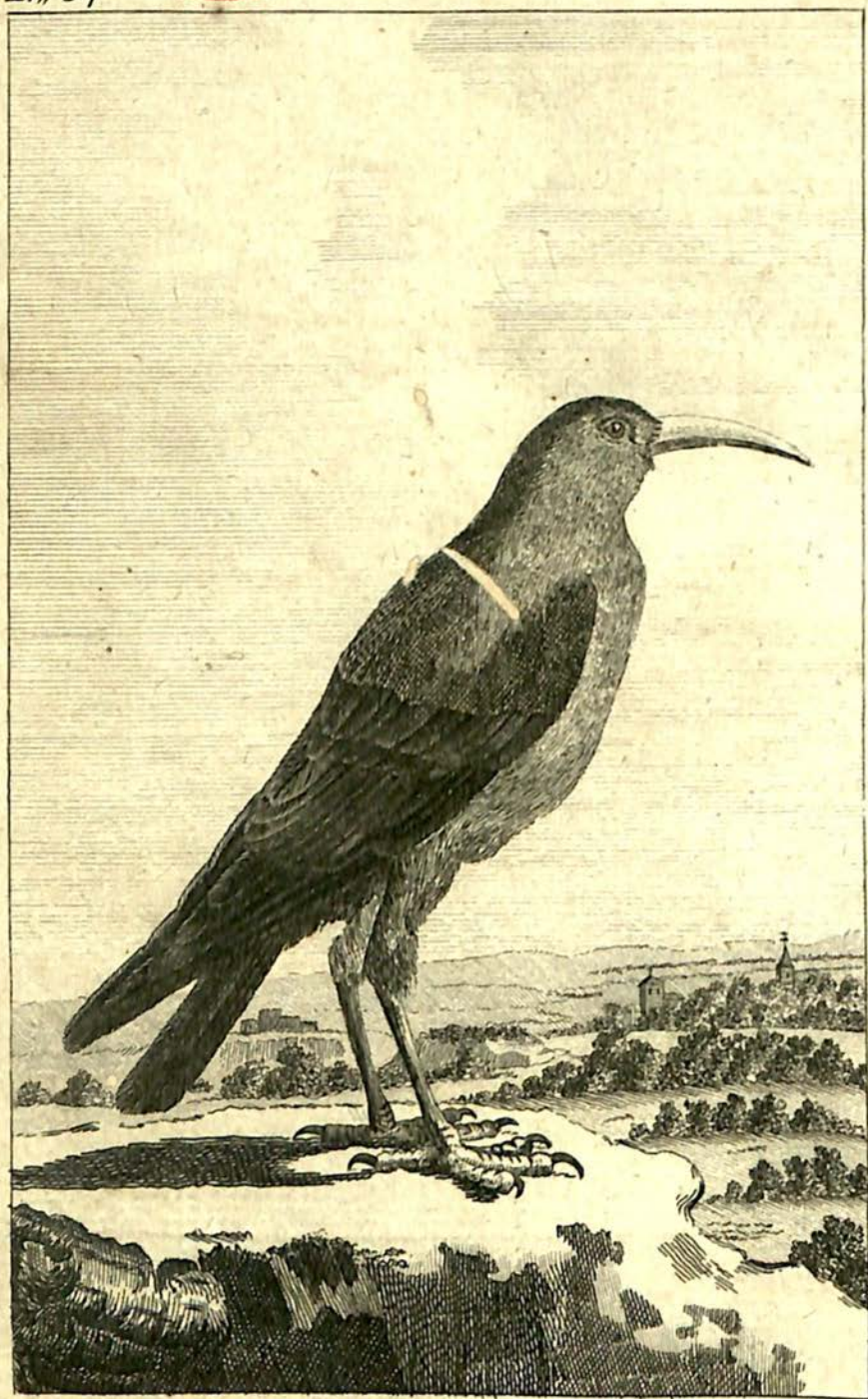
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PREFACE, NOTES, AND ADDITIONS,
BY THE TRANSLATOR.

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THE CORNISH COUGH.

T H E
N A T U R A L H I S T O R Y
O F
B I R D S.

The RED-LEGGED CROW.

Le Crave ou *Le Coracias* * Buff.
Corvus-Graculus, Linn. and Gmel.
Gracula Pyrrhocorax Scop.
Coracias, Aldrov. and Briss.
Coracias, seu *Pyrrhocorax*, Ray.
Cornix rostro pedibusque rubris †, Klein.
The Cornish-Chough, Cornwall-Kae, or Killegreaw,
 Alb. and Will.

SOME authors have confounded this bird with the Alpine Crow; but the distinction is clearly marked. Its bill is longer, more slender, more hooked, and of a red colour; its tail is also shorter, its wings longer, and, as a natural consequence, its flight is more lofty; and lastly, its eyes are environed by a small red circle.

It is true that the Red-legged Crow resembles the Alpine Crow in the colour and in some com-

* In Greek, Κορακίας; and in modern Greek, *Scurapola*: in Camden's Latin, *Avis Incendiaria*: in Italian, *Spelviero*, *Taccola*, *Tatula*, *Pazon*, *Zori*, *Cutta*: in French, *Chouette* and *Choucas Rouge*: in German, *Stein-taube* (*stone-dove*), *Stein-tulen*, *Stein-krae*.

† i. e. The Crow with bill and feet red.

mon instincts. In both, the plumage is black with green reflections of blue and purple, which have an admirable effect on that dark ground. Both delight in the summits of the loftiest mountains, and seldom descend into the plain. The former, however, is much more diffused than the latter.

The Red-legged Crow is of an elegant figure, lively, restless, turbulent, but can be tamed to a certain degree. At first it is fed with a sort of paste made with milk, bread, and grain, &c. and afterwards it is reconciled to whatever is served for our tables.

Aldrovandus saw in Bologna in Italy, a bird of this sort, which had an odd trick of breaking panes of glass from the outside, as if to enter the house by the window: this instinct is undoubtedly the same with that of the crows, the magpies, and daws, which are attracted by every thing that glitters. It has even been known to snatch from the chimney light pieces of wood, and thus set the house on fire; so that this dangerous bird adds the character of an incendiary to that of a domestic plunderer. But I should imagine that this pernicious habit might be turned against itself, and, like the lark, it might be decoyed into snares, by means of mirrors.

Salerne saw at Paris two Red-legged Crows which lived peaceably with the house pigeons; but it is probable that he had not seen the Wild Crow of Gesner, nor the description which that
author

author gives of it; since he says after Ray, that it agreed in every thing but in size with the *coracias*; whether he meant the bird to which, this article is allotted, or the *pyrrhocorax* of Pliny. These birds are widely different, and Gesner was careful not to confound them. He knew that the Wild Crow differs from the Red-legged Crow by its crest, its carriage, the shape and length of its bill, the shortness of its tail, the excellence of its flesh, at least when young; that it was not so noisy or so sedentary, and that it changed its residence more regularly at certain times of the year; not to mention other differences.

The Red-legged Crow has a shrill though a pretty loud cry, very like that of the Sea-pie. It chatters almost incessantly; and Olina remarks that it is bred not for its voice, but for its beautiful plumage†. Belon, however, and the authors of the British Zoology say, that it learns to speak.

The female lays four or five white eggs, spotted with dirty yellow. She builds her nest on the tops of old deserted towers, or on fright-

* "They arrive in the beginning of the spring, at the same time as the storks.—They retire the first of all that I know, about the beginning of July," &c. GESNER *de Avibus*.

† The *cutta* with a red bill, which on other parts is all black like the Crow, except that its feet are yellow, comes from the mountains. In Latin it is named *Coracias*. This bird does not talk, but is kept merely on account of its beauty." *Uccelleria*:

ful precipices ; for, according to Edwards, these birds prefer the cliffs all along the west coast of England, to similar situations on the flat shores of the east and south. I shall add another fact of the same kind, which I owe to a very respectable observer*. It is, that though these birds be inhabitants of the Alps, of the mountains of Switzerland, and of those of Auvergne, &c. they are never found on the mountains of Bugey, nor in all the chain that stretches along the confines of the country of Gex as far as Geneva. Belon, who saw them on Mount Jura in Switzerland, again observed them in the islands of Crete, and always on the summits of rocks. But Hasselquist affirms that these birds arrive in Egypt, and spread through the country after the inundation of the Nile has subsided and the waters are about to return into their bed. If we admit this fact, which however seems to be repugnant to the general nature of these birds, we must suppose that they are drawn to Egypt by the abundance of food with which the lands are replete, after being left by the waters to the powerful influence of a tropical sun : and in fact, they feed on insects, and on seeds which have been lately committed to the soil, and swell with milky juice, the effect of incipient vegetation. It follows then, that these birds do not confine their residence exclusively to rocks and the summits of mountains, since at

* Hebert, treasurer extraordinary of war at Dijon.

certain seasons they regularly appear in Lower Egypt. Nor do they seem to be equally attached to every bleak eminence; but to be directed in their choice by certain peculiar circumstances, which have hitherto escaped observers.

It is probable that the *coracias* of Aristotle* is the same with the Red-legged Crow, and not the *pyrrhocorax* of Pliny†, which seems to differ in size and in the colour of its bill, which is yellow. But the bird of which we here treat, has a red bill and red feet; and as it was seen by Belon on the Cretan mountains, it was more likely known to Aristotle, than the *pyrrhocorax*, which was supposed by the ancients to be confined to the Alps, and in fact was not seen by Belon in Greece.

I must admit, however, that Aristotle makes his *coracias* a species of daw (*κολοιος*), as we regard the *pyrrhocorax* of Pliny; which would seem to favour the identity, or at least the proximity of these two species. But as in the same chapter I find a palmipede bird joined with the daws as of the same genus, the philosopher evidently confounds birds that are of a very different nature; or rather, since the text traces a regular analogy, the confusion must have arisen from some mistakes of the copyists. Besides, the word *pyrrhocorax*, though entirely of Greek

* *Hist. Anim.* lib. ix. 24.

† *Lib.* x. 48.

derivation*, occurs not in any part of Aristotle's treatise; and Pliny, who was well acquainted with that work, could discover in it no account of the bird on which he bestows that name; and in his description of the *pyrrhocorax*, he does not copy what the Greek philosopher had said on the subject of the *coracias*.

The specimen examined by the authors of the British Zoology weighed thirteen ounces, and its wings extended about two feet and a half: the tongue was almost as long as the bill, somewhat hooked: the nails black, strong, and hooked.

Gerini mentions a bird of this kind whose bill and feet were black, and which he considers as a variety of the Red-legged Crow, affected only by some accidental differences of colour, arising from the distinction of the age or sex†. [A]

* It signifies *fire-crow*.

† *Storia degli Uccelli*, tom. ii. p. 38.

[A] The specific character of the Chough, *Corvus-Graculus*, Linn. is, that "it is blackish violet, its bill and feet red." It resembles the jackdaw in habits and size, being sixteen inches long: it is voracious, gregarious, and circles as it flies. Borlase says, that it is not as mischievous as commonly represented, the tricks of the jackdaw being often imputed to it by mistake.

The HERMIT CROW*.

Le Coracias Huppé ou Le Sonneur †, Buff.

Corvus-Eremita, Linn. and Gmel.

Coracia Cristata, Briss.

Corvus Sylvaticus, Gefner; Will.

Upupa Montana, Klein.

Gefner's Wood-Crow, Will.

Wood-Crow from Switzerland, Arn.

THIS bird is of the size of a crow; its plumage is black, with fine grey reflections, which are variegated neatly as in the Red-legged Crow: like it, the bill and feet are red; but the bill is still longer and more slender, very proper for inserting into the fissures of rocks and the cracks in the ground, into the holes of trees and walls, in search of insects and worms, which are its principal food. In its stomach are found portions of the mole-crickets. It eats also the *larvæ* of the May-bug, and is useful on account of the havock which it makes among these destructive insects.

The feathers on the top of its head are longer than the rest, and form a kind of crest, which

* In Zurich it is called *Scheller*, *Waldt-rapp*, *Stein-rap*; in Bavaria and Stiria, *Claufs-rapp*; in Italian, *Corvo Spileto*; in Polish, *Kruk-lesny*, *Nocny*.

† i.e. *The Crest Chough, or the Sounder*. This name has been given by some persons to this bird, because its voice resembles the tinkling of the bells fastened to the necks of cattle.

hangs backwards; but this only appears after they are full grown, and again disappears when they are aged. Hence the reason that in some places they are called *Bald Crows*, and in some descriptions they are represented as having a yellow head marked with red spots. These colours are probably the tints of the skin, which age leaves bare.

The crest, which has given occasion to the name of *Mountain-crested**, is not the only distinction between this bird and the Red-legged Crow; its peck is less and more slender, its head smaller, its tail shorter, &c. Besides, it is known only as a bird of passage, while the Red-legged Crow, as we have already seen, is migratory, but only in certain countries and in particular circumstances. Gefner has therefore divided them properly into two species; and I have distinguished them by different names.

The Hermit Crows fly very lofty, and generally go in flocks†. They seek their food often in the meadows and marshy places, and always nestle on the tops of old deserted towers, or in the clefts of frightful inaccessible rocks. Sensible, as it were, that their young are delicate meat,

* Klein.

† I am aware that Klein makes the Hermit Crow a solitary bird; but this is directly contrary to what Gefner asserts, the only original observer, whom Klein copies, without being conscious, when he transcribes from Albin.

and much valued by the luxurious, they are careful to breed them out of the reach of man. But there are still some men hardy enough to risk their lives for the most sordid gain, and allow themselves to be let down by ropes from giddy heights, to plunder the infant brood in their recesses, and reap the most dangerous of harvests.

The females lay generally two or three eggs every hatch; and those who wish to get the brood, commonly leave a young bird in each nest, in order to invite the parents to return the following year. When the young are plundered, the parents cry, *ka, ka, ka*, but are seldom heard at any other time. The young are easily tamed, and the more so if they be taken early and before they can fly.

They arrive in the country of Zurich towards the beginning of April, at the same time with the storks. Their nests are sought for about Whit Sunday, and they depart, the earliest of all the birds, in the middle of June. I know not why Barrere has made the Hermit Crow a species of curlew.

The Hermit Crow inhabits the Alps, the lofty mountains of Italy, Stiria, Switzerland, Bavaria, and the high cliffs which border on the Danube, in the vicinity of Passau and Kelkeym. These birds choose for their retreat certain natural breast-works, or cells of a good aspect, among the

the rocks, and hence the name *Klaufs-rappen*, or *Monk-Raven*. [A]

[A] Specific character: "Greenish, head yellowish, back of the head somewhat crested, the bill and feet red."



THE RAVEN.

The R A V E N.

Le Corbeau, Buff.

Corvus-Corax, Linn and Gmel.

Corvus, Briss. Klein, and Will. *

The Corbey, Sibb. *Scotia Illustrata*.

THIS bird has always been famous; but its bad reputation has been owing, most probably, to its being confounded with other birds, and loaded with their ill qualities. It has ever been regarded as the lowest of the rapacious tribe; the most cowardly and the most disgusting. Filth and rotten carcases, it is said, are its chief food; and when it gluts its appetite on live prey, its victims are the weak or useful animals, lambs, leverets †, &c. yet it sometimes attacks the large

* In Greek, *Κοραξ*: in Latin, *Corvus*: in Spanish, *Cuervo*: in Italian, *Corvo*: in German, *Rabe*, *Rave*, *Kol-rave*, (*coal-raven*): in Swedish, *Korp*: in Polish, *Kruk*: in Hebrew, *Oreb*: in Arabic, *Gerabib*: in Persian, *Calak*: in old French, *Corbin*. The appellations bestowed, in all languages, are evidently formed from the Raven's croak. The Scotch name *Corbey*, like many others of that dialect, was introduced from the French. The English word *Raven* is derived from the German *Rabe*.—M. Montbeillard, author of this article, objects to the indiscriminating application of the name *Corvus*, to the crows, daws, choughs, &c. The *corvus* of the ancients was appropriated to the large species, the Raven differing from the rest considerably in its habits and instincts. It is as large as a good cock, and would weigh three carrion crows and two rooks.

† Aldrovandus relates a story of two Ravens concerting an attack upon a hare; they picked out its eyes, and devoured it.

. animals

animals with success, supplying its want of strength and agility by cunning; it plucks out the eyes of buffaloes *, and then, fixing on the back, it tears off the flesh deliberately: and what renders the ferocity more detestable, it is not incited by the cravings of hunger, but by the appetite for carnage; for it can subsist on fruits, seeds of all kinds, and indeed may be considered as an omnivorous animal †.

This violence and indiscriminating voracity of the Raven has procured it a various treatment: sometimes it has been proscribed as a pernicious, destructive animal; sometimes it has been afforded the protection of law, as useful in extirpating noxious insects. In poor, thinly inhabited states, the Raven may prove a burthen some and expensive guest; but in

* *Jelian Natur. Anim.* lib. ii. 51. *Recueil des Voyages qui ont servi à l'Etablissement de la Compagnie des Indes*, tom. viii. p. 273. This is, perhaps, the source of the antipathy which is said to subsist between the Ox and Raven. See *Aristotle Hist. Anim.* lib. ix. 1. I can hardly believe that a Raven attacks a buffalo, as travellers relate. * It may happen that these birds will sometimes alight upon the backs of the buffaloes, as the hooded crow alights upon the backs of asses and sheep, or the magpie upon the backs of hogs, to eat the insects which lodge in the hair of these animals. It may happen, too, that the Ravens, by excessive strokes with their bill, may tear the buffaloes' hides, or even, attracted by the glistening of the pupil, they may pick out the eyes; but I cannot persuade myself that they deliberately determine to eat the buffaloes alive, and are able to accomplish that undertaking.

† See *Aristotle Hist. Anim.* lib. viii. 3. and Willoughby, p. 82. I have seen them fed, in a great measure, with flesh, either raw or cooked.

rich,

rich, populous countries, it will be serviceable by devouring the filth generated in them. For this reason it was formerly, according to Belon, forbidden in England * to hurt this bird ; but in the narrow islands of Ferroe, Malta, &c. a premium was offered for its destruction †.

If to the features which we have now traced of the Raven, we join its gloomy plumage ; its cry, still more gloomy, though very feeble ; its ignoble port, in proportion to its bulk ; its savage look ; its body smelling perpetually of infection ‡ ; we shall not be surprised that in all ages it has been regarded as an object of aversion and horror. Its flesh was forbidden

* Belon wrote in 1550. " This bird is esteemed sacred by our people, and few persons will dare to kill it." *Fauna Suecica*, N° 69.—The Ravens enjoy the same protection at Surinam, according to Dr. Fermin. *Description de Surinam*, tom. ii. p. 148.

† *Acts of Copenhagen* for the years 1671 and 1672. With regard to the island of Malta, I have been assured that the birds are carrion crows ; but at the same time, as I am told they inhabit the most desert rocks on the coast, I am disposed to believe that they are Ravens.

‡ The authors of the British Zoology alone assert, that the Raven has an agreeable smell, which is difficult to believe of a bird that feeds on carrion. We know also by experience, that Ravens just killed, give the fingers a smell as disagreeable as that of fish. This I have been assured by Hebert, a very respectable observer ; and the fact is confirmed by the testimony of Hernandez, p. 331. It is indeed said of the *Carancro*, a sort of vulture in America, which has also been termed a Raven, that it exhales an odour of musk, though it lives upon filth. (*Dupratz Hist. de la Louisiane*, tom. ii. 3.) But most authors assert directly the contrary.

to the Jews; savages never eat it *; and, among ourselves, the most starved wretches discover an extreme dislike to it, and remove the coriaceous skin before they make their disgusting meal. In every country it is reckoned an ominous bird, which announces impending calamities. Grave historians † have described pitched battles between armies of crows and those of other ravenous birds, and have regarded these combats as foreboding the bloody wars kindled among nations. And, how many persons, at present, are alarmed and dejected at the noise of its croaking! The whole of its knowledge of futurity is limited, however, like that of the other inhabitants of the air, to a greater sensibility to the changes in its element, and to the expression of its feelings by certain cries and actions. In the southern provinces of Sweden, Linnæus tells us, that the Ravens, in fine weather, soar to an immense height, and make a clangorous noise, that is heard at a great distance §. The authors of the British Zoology add, that in this case they fly generally in pairs. Other writers ||, in less enlightened times, have given other remarks, mingled with fable and superstition.

* Voyage du Pere Theodat. p. 300.

† Æneas Sylvius, *Hist. Europ.* cap. 53.—Bembo, *Init.* lib. v.—Gefner *de Avibus*, p. 347.

§ *Fauna Suecica*, No. 69.

|| Pliny, Belon, Gefner, Aldrovandus, &c.

In those times, when augury formed a part of religion, the Ravens, though bad prophets, could not fail to be birds of vast importance. The fondness of prying into futurity, how dismal soever may be the prospect, is an ancient malady of the human race. All the various motions of the Raven were studied with the most scrupulous attention, all the circumstances of its flight, all the differences of its voice, of which, not to mention the minute discriminations too difficult to be appretiated *, no less than sixty-four distinct inflexions were reckoned up. Each had its determined signification ; the artful applied themselves to the profession, and credulity drew multitudes to their oracles †. Pliny himself, though superior to the prejudices of the vulgar, was so far carried by the tide of popular opinion as to mention its most infaustous cries ‡. Some even carried this folly to such lengths as to eat the heart and entrails of these birds, from the hope of acquiring the spirit of prophecy §.

But the Raven has not only a great number of inflections of voice corresponding to its interior affections, it has also the talent of imitating the cry of other animals ||, and even human discourse;

* Aldrovandus.

† Pliny, *lib. xxix. cap. 4.*

‡ *Id. lib. x. 12.* " The worst omen is when they cluck with a strangled voice."

§ Porphy. *De abstinendo ab Animant.* lib. ii.

|| Aldrovandus.

and

and to improve this natural quality, the ligament of the tongue has been cut. *Colas* is the word which it pronounces the most easily*; and Scaliger heard one which, when hungry, called distinctly on the cook by the name of *Conrad*†. These words bear indeed some resemblance to the ordinary cry of the Raven.

These speaking birds were highly prized at Rome, and a philosopher has not disdained to relate the history of one of them‡. They not only learn to prattle or repeat words, but become quite familiar. They can be tamed though old§, and appear even susceptible of a lasting and personal attachment||.

In consequence of their pliancy of temper, they can be instructed, not indeed to divest them-

* Belon.

† *Exercit in Cardanum*. Scaliger adds, as a pleasant anecdote, that this same Raven, having found a paper with written music, pricked with its bill as if it were reading and beating time. It seems more natural to suppose that the bird mistook the notes for insects, on which it sometimes feeds.

‡ Being early accustomed to speak, it flew every morning to the *rostra*, and saluted Tiberius, then the two Cæars, Germanicus, and Drusus, and afterwards the Roman people as they passed by," &c. *Pliny*, lib. x. 48.

§ Gesner, p. 338.

|| Witness the tame Raven mentioned by Schwenckfeld, which having suffered itself to be carried too far by its wild companions, and not being able to regain its way, discovered afterwards on the high road the man who had been used to feed it, hovered some time croaking above his head, as if to pay him homage, then alighted upon his hand, and never more left him. *Aviarius Silesia*, p. 232.

selves

selves of their voracity, but to moderate it and direct it to the service of man. Pliny speaks of Craterus, an Asiatic, who was noted for his skill in breeding Ravens to hunt, and who could make himself be followed even by the wild Ravens*. Scaliger relates, that king Louis (probably Louis XII.) had one so trained, and used it in the chase of partridges†. Albertus saw one at Naples which caught partridges and pheasants, and even other Ravens; but to hunt birds of its own species it required to be roused, and, as it were, forced by the presence of the falconer‡. Lastly, It can sometimes be taught, it would seem, to protect its master and assist him against his enemies by its manœuvres: at least if we give credit to the story which Aulus Gellius tells of the Crow of Valerius§.

• Lib. x. 48.

† In Cardanum, exercit. 232.

‡ Aldrovandus, p. 702. Also Dampier, vol. ii.

§ A Gaul of high stature having challenged the bravest Roman to single combat, a Tribune named Valerius stepped forth and proved victorious by the assistance of a Raven which perpetually harassed his antagonist, tearing his hands with its bill, and darting at his face and eyes. Valerius afterwards bore the name of the Raven (*Corvus*). *Noël. Atticæ*, lib. ix. 11.

[This story is also related by Livy, lib. vii. 26. The Gauls were so much intimidated by the fall of their champion, that the Romans gained a complete victory. The Raven is said to have perched on the head of Valerius, and was regarded as a token of victory sent down from heaven: so that it must have been a wild Raven. But the story is evidently fabulous. T.]

The Raven has also great sagacity at scenting out * carrion from a distance: Thucydides ascribes to it the instinct of abstaining from the carcasses of animals that have died of the plague †. It has been said also, that a bird of this kind, wanting to drink out of a vessel which was too narrow to admit it, had the shrewdness to drop into it small stones, which by degrees raised the water to the top ‡. This thirst, if the fact be true §, is a circumstance which distinguishes the Raven from all the rest of the birds of prey, especially from those which feed on live game, which are stimulated by hunger, and never desire but to drink blood. Another difference is, that the Ravens are more social than the other rapacious birds: but it is easy to account for this; since, as they eat every sort of food, and have more resources than the rest of the carnivorous kind, they can subsist in greater numbers on the same extent, and have not therefore the same causes of separation. We may here observe, that though tame Ravens feed on all sorts of flesh, and those in the state of liberty be generally supposed to commit great havock among the moles and field-

* "The Ravens are the only birds employed in the auspices that seem conscious of their own faculties; for when the guests of Media were slain, they all flew out of Peloponnesus and the region of Attica." PLINY, lib. x. 12. from ARISTOTLE, lib. ix. 31. The same quality is also noticed in the Fauna Succica, No. 69.

† Lib. ii.

‡ Pliny, lib. x. 43.

§ It is also remarked by Gesner.

mice;

mice *; Hebert, who has noticed them attentively for a long course of years, never saw them tear or mangle dead carcases, or even settle upon them: he is therefore of opinion, that they prefer insects, and especially earth-worms, to every other sort of food. He adds, that earth is found in their excrements.

The Ravens, the real mountain Ravens, are not birds of passage, and in this respect they differ, more or less, from the Crows with which they associate. They seem particularly attached to the rock where they were bred, or rather where they have paired; it is their ordinary residence, which they never entirely abandon. If they descend into the plains, it is to procure their subsistence; and this more rarely happens in summer than in winter, because they avoid the heat, which appears to be the only influence that difference of seasons produces on them. They do not pass

* It is said, that in the Isle of France, a certain species of Raven is religiously kept, with a view to destroy the rats and mice. *Voyage d'un Officier du Roi*, 1772.. p. 122. It is said that the islands of Bermudas having been ravaged five years in succession by a prodigious multitude of rats, which devoured the plants and trees, and crossed, by swimming, from one island to another; these rats suddenly disappeared, and no cause could be assigned, except that a great number of Ravens had, in the latter years, resorted to the islands, which were never seen there either before or since. But we have no proof that Ravens prey much upon rats: the inhabitants of the Isle of France may, like others, entertain a prejudice; and with respect to the rats of the Bermuda islands, they may have been starved to death; they may have devoured one another, as often happens; or they may have been drowned in their passage between the islands.

the night in the woods, like the Carrion Crows; they choose, in their mountains, a retreat sheltered from the northern blast, under the natural alcoves secured by the recesses and projections of the rocks. Thither they retire during the night, to the number of fifteen or twenty. They sleep perched on the bushes that grow between the rocks, and build their nests in the crevices, or in the holes of walls, on the tops of old deserted towers, and sometimes on the high branches of large straggling trees*. Each male attaches itself to a female, with which it remains united for the course of many years †; for these birds, which we view with disgust, can yet inspire mutual and constant love, and, like the turtle, express the gradual swell of passion. The male, if we believe some authors, begins always with a sort of love-song ‡, then caresses and bills with his mate; and it has even been alleged, that they copulate by the bill §. The fact is, that

* Linnæus says, that in Sweden the Raven nestles chiefly upon the pines. *Fauna Suecica*, No. 69. And Frisch asserts, that in Germany they pitch mostly upon great oaks; that is, they prefer the loftiest trees, whether pines or oaks.

† “They are said to maintain their conjugal engagements sometimes forty years.”—ALDROVANDUS.—Athenæus goes still farther.

‡ Oppian, *de Aucupio*.

§ Aristotle ascribes this absurdity to Anaxagoras, and is even at pains to refute it seriously; for the female Ravens, he says, have a *vulva* and *ovaria*, and that if the male semen entered by the mouth, it would be digested, and produce nothing. *De Generatione*, lib. iii. 6.

we see their courtships frequently in the day-time; but the consummation is performed in the silence and obscurity of the most secret recesses*; and hence, probably, the origin of the fable. Nor must we ascribe this to any motives of decency; wild animals are conscious of the danger of their situation, and are anxious to provide for their security. The *White-John*, we have already seen, conceals itself while it drinks, because, its head being plunged up to the eyes in the water, it is in danger of being surprized. The Raven has the more need of caution, since he is languid in the act of coition; which probably lasts a considerable time; he therefore seeks a secret retreat, where, in undisturbed security, he may indulge his passion†.

The female is distinguished from the male, according to Barrere, by its plumage being of a lighter black, and her bill weaker; and my own observations seem to confirm this remark. She lays, about the month of March ‡, five or six eggs §, pale and bluish green, marked with a great number of spots and streaks of a dirty co-

* Albertus says, that he once witnessed the copulation of Ravens, and that it was performed as usual with other birds. See Gesner, p. 337.

† “The genus of the Ravens is not libidinous, because it is not very prolific.” ARISTOTLE, *de Generatione*, lib. iii. 6.

‡ Willoughby says that the Ravens sometimes lay earlier in England.

§ Aristotle, *Hist. Anim.* lib. ix. 31.

lour*. She sits about twenty days †, during which time the male provides her with food, and the supply is large; for the peasants sometimes find in the Ravens' nests, or near them, considerable heaps of grain, nuts, and fruits. It has been suspected, indeed, that this hoarding is intended not only for the females during incubation, but for the subsistence of both through the winter‡. But whatever be their motives, certain it is, that the Ravens steal not only provisions, but whatever tickles their fancy, particularly bits of metal and glittering substances §. There was one at Erford, which had the assiduity to carry, one by one, and conceal beneath a stone in a garden, a quantity of small pieces, amounting to five or six florins ||. Every country furnishes stories of such domestic thefts.

When the young are hatched, they are far from being of the colour of their parents; they are rather white than black, contrary to the swans, which are originally brown, though destined to wear a snowy plumage¶. At first the mother seems to treat her offspring with indifference, nor does she feed them till they begin to be feathered: it has been alleged, that she alters her conduct the moment she is convinced

* Willoughby.

† Aristotle, *Hist. Anim.* lib. vi. 6.

‡ Aldrovandus.

§ Frisch.

|| Gesner, *de Avibus*, p. 338.

¶ Aldrovandus.

by their plumage that they are not spurious*. But for my part, I can see nothing in this that has not place in other animals, and even in man, some days after birth; a certain time is necessary to reconcile them to a new element and a new existence. Nor is the young Raven then totally destitute of food; for a part of the yolk is included in the *abdomen*, and flows insensibly into the intestines by a particular duct†. After a few days, the mother feeds the young with the proper aliments, which previously undergo a preparation in her crop, and are then disgorged into their bills, nearly as in the pigeons‡.

But the male not only provides for the family, but watches for its safety. If he perceive a kite, or other such rapacious bird, approach the nest, the danger animates his courage; he takes wing, gains above his foe, and dashing downwards, he strikes violently with his bill; both contend for the ascendancy, and sometimes they mount entirely out of sight, till, overcome with fatigue, one or both fall to the ground§.

Aristotle, and many others after him, pretend that, when the young are able to fly, the parents drive them out of the nest; and if the tract where they are settled affords too scanty a subsistence, they entirely expel them from

* Aldrovandus.

† Willoughby.

‡ *Idem*.

§ Frisch.

their precincts*. If this fact were true, it would shew that they are really birds of prey; but it does not agree with the observations which Hebert has made on the Ravens which inhabit the mountains of Bugey; for they protract the education of their brood beyond the period when these are able to provide for themselves. As it seldom happens that opportunity and talents concur in making such observations, I shall relate them in his own words:

“ The young Ravens are hatched very early
 “ in the season, and against the month of May
 “ are able to quit their nest. A family of them
 “ was every year bred opposite to my windows
 “ upon the rocks which terminate the prospect.
 “ The young, to the number of four or five,
 “ sat on the large detached fragments about the
 “ middle of the precipice, where they were ea-
 “ sily seen, and drew notice by their continual
 “ wailing. Every time that the parents
 “ brought them food, which happened fre-
 “ quently during the course of the day, they
 “ called with a cry, *crau, crau, crau*, very dif-
 “ ferent from their other noise. Sometimes one
 “ tried to fly, and, after a slight essay, it returned
 “ to settle upon the rock. Almost always some
 “ one was left behind, and its wailing then be-
 “ came incessant. After the young had strength
 “ sufficient to fly, that is, fifteen days at least.

* Aristotle, *Hist. Anim.* lib. ix. 31.

“ after

“ after their leaving the nest, the parents conducted them every morning to the field, and in the evening led them back. It was commonly five or six in the afternoon when the family returned, and they spent the rest of the day in noisy brawling. This practice lasted the whole summer, which would give reason to suppose that the Ravens have not two hatches annually.”

Gesner fed young Ravens with raw flesh, small fishes, and bread soaked in water. They are very fond of cherries, and swallow them greedily, with the stones and stalks; they digest, however, only the pulpy part, and in two hours afterwards vomit up the rest. It is also said that they disgorge the bones of those animals which they eat entire, like the kestrel, the nocturnal birds of prey, the fishing birds, &c.* Pliny says †, that the Raven is subject every summer to a periodical distemper, which lasts sixty days, whose principal symptom is excessive thirst: but I suspect that this is nothing but moulting, which is more tedious in this bird than in many others of the rapacious tribe ‡.

No person, as far as I know, has determined the age at which the young Ravens have acquired their full growth, and are able to propagate. If in the birds, as in the quadrupeds, each period of life was proportional to the total

* Aldrovandus,

† Lib. xxix. 3.

‡ Gesner.

space of existence, we might suppose that the Crows required many years to reach their adult state; for though the venerable age ascribed by Hesiod * must be considerably curtailed, it seems well ascertained that this bird sometimes lives a century or more. In many cities of France they have been known to attain to that distant period; and in all countries and all ages, they have been reckoned as birds extremely long-lived. But the progress to maturity must be slow in this species compared to the duration of their life; for towards the end of the first summer, when all the family consort together, it is difficult to distinguish the old from the young, and very probably they are capable of breeding the second year.

We have already remarked that the Crow is not black at first. In the decline of life also, its plumage loses the deep colour; and in extreme age, changes into yellow †. But at no time is this bird of a pure black, without the intermixture of other shades: Nature knows no ab-

* "Hesiod assigns nine of our ages to the Crow, the quadruple to the stags, and this tripled to the Ravens." PLINY, lib. vii. 48. If we estimate a generation at thirty years, the age of the Crow would be 270 years; that of the stag, 1080 years; and that of the Raven, 3240 years. The only way to give a reasonable sense to the passage, is to understand the *ætas* of Pliny, and the *γενεα* of Hesiod, to mean a year: and, on this supposition, the life of the Crow would be reckoned at nine years; that of the stag, thirty-six; and that of the Raven, 108, as proved by observation."

† Aristotle, *de Coloribus*,

solute uniformity. The black, which predominates, is mingled with violet on the upper part of the body, with cinereous on the throat, and with green under the body and on the quills of the tail, and the largest feathers of the wings and the remotest of the back*. Only the feet, the nails, and the bill, are quite black; and this colour of the bill seems to penetrate to the tongue, as that of the feathers appears to tincture the flesh. The tongue is cylindrical at its base, flattened and forked near the tip, and roughened with small points on the edges. The organ of hearing is very complicated, and more so, perhaps, than in the other birds†. It must also be more sensible, if we credit Plutarch, who says, that he has seen Crows fall down stunned with the noisy acclamations of a numerous multitude, agitated by violent emotions‡.

The œsophagus dilates at its junction with the ventricle, and forms a kind of craw, which was not overlooked by Aristotle. The inner surface of the ventricle is furrowed with wrinkles; the gall-bladder is very large, and adheres to the intestines§. Redi found worms in the cavity of the *abdomen* §: the length of the gut is nearly twice that of the bird itself, measuring

* Brisson.

† Acts of Copenhagen, ann. 1673.

‡ Life of T. Q. Flaminius.

§ Willoughby.—Aristotle, *Hist. Anim.* lib. ii. 17.

§ *Collect. Acad. Etrang.* tom. iv. p. 521.

from the tip of the bill to the extremities of the nails; that is, a medium between the extent of the intestines of the true carnivorous birds and the true granivorous: in a word, it is exactly suited for an animal which lives partly on flesh, and partly on fruits*.

The appetite of the Raven, which is thus reconciled to every sort of aliment, proves often its destruction, from the ease with which bird-catchers can provide a bait. The powder of the *nux vomica*, which is mortal to so many quadrupeds, is also a poison to the Raven; it is benumbed, and drops soon after eating the dose; but the moment of intoxication must be seized, for the torpor is often only transient, and the bird recovers strength sufficient to reach its native rock, there to languish or expire †. It is also caught by various sorts of nets, snares, and gins, and even by the bird-call, like the little warblers; for it also entertains an antipathy to owls, and cannot see them without venting a cry ‡. It is said to wage war with the kite, the vulture, and the sea-pie ||; but this

* A respectable observer assured me, that he saw a Raven drop a nut more than twenty times from the height of twenty-four or thirty yards, and each time picked it up; but it could not succeed in breaking it; all this being done in a ploughed field.

† Gesner, p. 339. *Journal Economique*, Dec. 1758.

‡ Traite de la Pipee.

|| Ælian. *Natur. Anim.* lib. ii. 51.—Aldrovandus, tom. i. p. 70. *Collect. Acad. Etran.* tom. i.

is nothing but the natural aversion to all carnivorous birds; which are enemies or rivals of each other.

When the Ravens alight upon the ground, they walk, but do not hop. Like the birds of prey, they have long vigorous wings, extending nearly three feet and a half; these consist of twenty quills, of which the two or three first* are shorter than the fourth, which is the longest of all; and the middle ones have a remarkable property, viz. that the ends of their shafts stretch beyond the vanes, and terminate in points. The tail contains twelve quills, which are about eight inches long, but somewhat unequal, the two middle ones being the longest, then those next, so that the end of the tail appears somewhat rounded on its horizontal plane †. This I shall afterwards call the *tapered tail* ‡.

From the extent of its wings we may infer the elevation of its flight. In storms and tempests the Raven, it is said, has been seen gliding through the air, conveying fire at its bill ||. This is only the luminous star formed at the point of its bill, in its passage through the elevated regions of the atmosphere, then surcharged

* Brisson and Linnæus say two; Willoughby, three.

† Add to this, that the Ravens have on almost their whole body a double sort of feathers, so closely adhering to the skin, that they cannot be plucked without the help of hot water.

‡ *Queue etagee*; i. e. like the steps of a stair-case.

|| Scala Naturalis apud Aldrovandum, tom. i. p. 704.

with electricity. From some appearance of this kind, probably, the Eagle has been termed the minister of thunder; for there are few fables but are founded upon truth.

Since the Raven has a lofty flight, and is capable of enduring every temperature, the wide world is opened for its reception*. In fact, it is scattered from the polar circle † to the Cape of Good Hope ‡ and the island of Madagascar §§; and its number is determined by the quantity of food which the various intermediate regions supply, and the convenience of the situations which they afford §. It sometimes migrates from the coasts of Barbary to the island of Teneriffe. It is found in Mexico, St. Domingo, and Canada ¶, and undoubtedly in the other parts of the New Continent, and of the adjacent islands. When it is once settled in a country, and has become accustomed to its situation, it seldom quits it to roam into another**. It grows even attached to the nest which it has built, and uses it for several years together.

Its plumage is not the same in all countries. Beside the changes which age introduces, the

* Aldrov. *Ornith.*

† Klein,

‡ Kolben.

§ Flaccourt.

§ Pliny says, from Theophrastus, that Ravens were strangers in Asia, Lib. x. 29.

¶ Charlevoix.

** Frisch.—Aristotle, *Hist. Anim.* lib. ix. 23,

colour is also subject to vary from the influence of climate. It is sometimes entirely white in Norway and Iceland, where numbers are also quite black *. On the other hand, white Ravens are found in the heart of France and Germany †, in nests where some are likewise black. The Mexican Raven, called *Cacalotl* by Fernandez ‡, is variegated with two colours. That of the Bay of Saldagne has a white collar ||; that of Madagascar, named *Coach*, according to Flacourt, is white under the belly. The same mixture of black and white occurs in some individuals of the European sort, even in what Brisson terms the *White Raven of the North* §, which ought rather to have been called the *Black and White Raven*, since the upper part of its body is black and the under white, its head white and black, and also its bill, its feet, its tail, and its wings: these have twenty-one quills, and the tail has twelve; and what is remarkable, the

* Horrebow.—Klein. John of Cay saw in 1548, at Lubeck, two white Ravens bred for the chace. *Id.* p. 58.

† *Ephemerides d'Allemagne*. Dr. Wisel adds, that in the year following, black Ravens were found in the same nests, and that in another nest, in the same wood, a black Raven and two white ones were found. Of the latter colour, they are sometimes killed in Italy. See GERINI *Storia degli Uccelli*, tom. ii. p. 33.

‡ *Hist. Avium Novæ Hispaniæ*, cap. clxxiv. p. 48. This is the *Corvus Varius* of Brisson, and the *Red Raven* of Latham. Gmelin also reckons it a variety.

|| Downton's Voyage, 1610.

§ This is the *White Raven* of Latham, which Gmelin makes a second variety.

* quills,

quills, at an equal distance on either side, which are commonly alike, are in this subject marked with black and white, differently distributed. This circumstance would induce me to suppose that this is only an accidental change produced on the natural colour, which is black, by the excessive rigour of the climate; and if this conjecture be well founded, it would follow, that this is improperly reckoned a permanent species, especially as all other animals that inhabit the arctic regions are clothed with a thicker fur than those of the same kind which live in milder climates.

These variations in the plumage of a bird so generally and so deeply impressed with black as the Raven, is another proof that colour can afford no permanent or essential character.

There is another kind of Raven which forms a variety in point of size. Those of Mount Jura, for instance, appeared to Hebert, who had an opportunity of comparing them, to be larger than those which inhabit the mountains of Bugey; and Aristotle * informs us, that the Ravens and Hawks were smaller in Egypt than in Greece. [A]

* *Hist. Anim.* lib. viii. 38.

[A] The specific character of the Raven, *Corvus-Corax*, LINN. is, "That it is black; its back of a black sky-colour; its tail somewhat rounded." To the very ample detail given in the text, we can add but few circumstances. The Raven weighs three pounds, and is twenty-six inches long. In the northern countries of

of Finmark, Iceland, and Greenland, it frequents the huts of the natives, feeds upon the offals of seals, and also devours birds eggs. It whirls dextrously in the air, and changes its prey from bill to feet, for relief. It replies to the echo of its croak. The male sits by day, and the female by night. On the approach of storms, it gathers under the shelter of crags. The Greenlanders eat its flesh, clothe themselves with its skin, make brushes of its wings, and split the quills for fishing-lines. When a physician, among the American savages, visits a patient, he invokes the Raven, as the sign of returning health: the Esquimaux, however, detest and dread the whole genus.

M

FOREIGN BIRDS, RELATED TO THE RAVEN.

The INDIAN RAVEN of BONTIUS.

Buceros-Hydrocorax, Linn. and Gmel.

Corvus Indicus Bontii, Ray and Will.

Corvus Torquatus, Klein.

The Indian Hornbill, Lath.

THIS bird is found in the Molucca islands, and chiefly at Banda. Our knowledge of it is drawn from an imperfect description and a wretched figure; so that we can only conjecture the European species to which it belongs. Bontius, the first and I believe the only one who has seen it, reckons it a Raven, in which he is followed by Ray, Willoughby, and some others; but Brisson conceives it to be a Calao. I would rather adhere to the former opinion; and my reasons are briefly these:

This bird, according to Bontius, resembles the Raven in the shape of its bill and in its port; though its neck is rather longer, and a slight protuberance appears in the figure rising on the bill.

This is a certain proof that he knew no other bird to which he could so readily compare it, and yet he was acquainted with the Calao of India.

India. He tells us indeed that it feeds upon nutmegs; and Willoughby considers this feature as different from the character of the Common Ravens; but we have already seen that these eat wild nuts, and are not so much carnivorous as generally supposed.

On the other hand, neither the description of Bontius nor his figure discovers the least trace of the indenting of the bill, which Brisson regards as one of the characters of the Calaos; and the little bump which appears on the bill bears no resemblance to the protuberance which distinguishes the Calao. Lastly, the Calao has neither the speckled temples, nor the black tail quills which are mentioned in the description of Bontius; and its bill is so singularly shaped, that an observer could not, I should suppose, have seen it, and not remarked its form, much less have taken it for the bill of a Common Raven.

The flesh of the Indian Raven of Bontius has a pleasant aromatic flavour, derived from the nutmegs, which constitute its principal food; and it is extremely probable that if our Raven had the same sort of aliments, it would lose its rank smell*.

It would require to have seen the Raven of the Desert (*graab el zabara*), which Dr. Shaw

* Linnæan character of Bontius' Indian Raven: "Its front bony, plain, and bare before, its belly yellow." It is often tamed, and employed to catch rats and mice: it is thirty inches long.

mentions*, to be able to refer it with certainty to its analogous European species. All that the Doctor says is, that it is rather larger than our Raven, and that its bill and feet are red. This last character has determined Dr. Shaw to reckon it a large Chough; that bird, as we have already seen, is indeed known in Africa; but how can we conceive a Chough to be greater than a Raven? I mention this to draw the attention of some intelligent traveller.

I find in Kœmpfer two other birds mentioned by the name of Ravens, without a single character to justify that appellation. The one is, according to him, of a middle size, but extremely audacious; it was brought from China to Japan as a present to the emperor. The other, which was also given to the emperor of Japan, was a bird from Corea, exceedingly rare, and called *Coreigaras*; that is, the Raven of Corea. Kœmpfer adds, that the Ravens which are common in Europe are not found in Japan, no more than the parrots and some other birds of India.

[*Note.* We should here place the Armenian bird, which Tournefort calls the *King of the Ravens*, if it were really a Raven, or belonged to that family. But a glance of the miniature figure will convince us that it is more related to the peacocks and pheasants, by its beautiful crest,

* Shaw gives it also the names *Crow of the desert*, *Red-legged Crow*, or *Pyrrhocorax*.

its rich plumage, its short wing, and the shape of its bill, though it is somewhat longer, and though other slight differences occur in the form of its tail and of its feet. It is properly termed on the figure *Avis Persica pavoni congener* (Persian bird akin to the peacock); I should therefore have mentioned it among the foreign birds analogous to the peacocks and pheasants, if I had been earlier acquainted with it.]

The CARRION CROW*.

Le Corbine, ou Corneille Noire, Buff.

Corvus Corone, Linn. and Gmel.

Cornix, Gefner; Ray, Will. Klein, Briff. &c.

THESE birds spend the summer in the extensive forests, from which they occasionally emerge to procure subsistence for themselves and their infant brood. Their chief food in the spring is partridges eggs, of which they are very fond, and are so dexterous as to pierce them and carry them on the point of the bill to their young. The consumption is prodigious; and though they are not the most sanguinary of the rapacious tribe, we may reckon them the most destructive. Fortunately, they are not numerous; we should hardly find two dozen of pairs in a forest of five or six miles compass in the environs of Paris.

During winter they live with the Rooks and Hooded Crows, and nearly in the same way. In this season, numerous flights of all sorts of

* In Greek, *Koravn*, which name was also applied to the prow of a ship, from the resemblance to the Crow's beak: in modern Greek, *Kegava*, *Kegava*, *Korva*: in Chaldaic, *Kurka*: in Italian, *Cornice*, *Cornacchia*, *Cornacchio*, *Gracchia*: in Spanish, *Cornia*: in German, *Kraß*, whence the English name.



THE CROW.

Crows assemble about our dwellings, keeping constantly on the ground, fauntering among our flocks and shepherds, hovering near the tracks of our labourers, and sometimes hopping upon the backs of hogs and sheep, with such familiarity, that they might be taken for tame domestic birds. At night they retire into the forests to lodge on the large trees, which they seem to choose as the general rendezvous, whither they resort from every quarter, sometimes from the distance of three miles all round, and whence they again fall out in the morning in quest of subsistence.

But this mode of life, which is common to the three species of Crows, is not equally suited to them all; for the Hooded Crows and the Carrion Crows become excessively fat, while the Rooks continue always lean. But this is not the only difference that subsists; towards the end of winter, which is the season of their amours, the Rooks remove into other climates, while the Carrion Crows, which disappear at the same time in the plains, make only a partial flitting, and retire into the next large forests, where they dissolve the general society to form new connexions more endearing and more intimate. They form into pairs, and seem to divide their territory into districts of about a quarter of a league in diameter, each of which maintains its separate family*. It is said that

* This has perhaps given occasion to say, that Ravens expel their young from their district as soon as these are able to fly.

this connexion subsists inviolate during the rest of their life ; and it is even alleged that if one of the couple happen to die the survivor will never enter into another union.

The female is distinguished by her plumage, which is of inferior lustre. She lays five or six eggs, and sits about three weeks, during which time the male supplies her with food.

I had an opportunity of examining a nest of a Crow which was brought to me in the beginning of July. It was found in an oak eight feet high, in a wood planted on a little hill, where were other oaks larger. The nest weighed two or three pounds ; it was formed on the outside with small branches and thorns rudely interwoven, and plaistered with earth and horse-dung ; the inside was softer, and lined carefully with fibrous roots. I found in it six young already hatched, all alive, though they had eaten nothing for twenty-four hours ; their eyes were not open*, and no plumage was to be seen on them except the point of the wing quills ; their flesh was a mixture of yellow and black ; the tip of the bill and their nails yellow ; the edges of the mouth a dirty white, and the rest of the bill and feet reddish.

When a buzzard or kestrel approaches the nest, the parents unite to attack them, and dart with such fury that they often kill them, splitting the skull with their bills. They also fight with the

* See Aristotle *de Generatione*, lib. iv. 6.

strikes; but these, though smaller, are so bold as often to prove victorious, drive them from the nest, and plunder the young.

The ancients assert, that the Crows as well as the Ravens are watchful of their young after the period of their flight*. This seems to be probable, and I should suppose that they do not separate from their parents the first year; for these birds readily associate with strangers, and is it not natural to suppose that the society which is formed in the same family will continue to subsist till interrupted by the breeding season?

Like the Raven, the Crow can be taught to prattle; it is also omnivorous: insects, worms, birds eggs, fish, grain, fruits, every thing, in short, is suited to it. It breaks nuts by dropping them from a height†; it visits snares and gins, and shares the plunder. It even attacks small game when exhausted or wounded, which in some countries has made it be bred for falconry‡; but in its turn it becomes the prey of a more powerful enemy, such as the kite, the eagle, owl, &c. §

* Aristotle, *Hist. Anim.* lib. vi. 6.

† Pliny, lib. x. 12.

‡ The nobility among the Turks keep sparrow hawks, hawks, falcons, &c. for the chase; others of inferior quality keep Grey and Black Crows, which they paint with different colours, carry upon their right hand, and call back by the sound *boub, boub*, frequently repeated, *Villamoni*, p. 677; and the Voyage to Bender by *the Chevalier Belleville*, p. 232.

§ "I myself saw a kite in the middle of winter plucking a crow near the high-way." Klein, *Ordo Avium*, p. 177.

Its weight is ten or twelve ounces; it has twelve tail feathers, all equal, and twenty in each wing, of which the first is the shortest and the fourth the longest; its wings spread three feet; the aperture of the nostrils is round, covered with a sort of bristles projecting forward; it has some black specks round the eyelids; the outer toe of each foot is united to that of the middle at the first joint; the tongue is forked and slender; the ventricle somewhat muscular; the intestines rolled into a great number of circumvolutions; the *cæca* half an inch long; the gall bladder large, and communicating with the intestinal tube by a double duct *. Lastly, the bottom of the feathers, that is, the part which is concealed, is of a deep ash-colour.

As this bird is exceedingly cunning, has an acute scent, and flies commonly in large flocks, it is difficult to come near it, and hardly possible to decoy it into snares. Some, however, are caught by imitating the screech of the owl, and placing lime twigs on the high branches; or it is drawn within gun-shot by means of an eagle owl, or such other nocturnal bird, raised on perches in an open spot. They are destroyed by throwing to them garden beans, of which they are very fond, and in which rusty needles have been concealed: but the most singular mode of catching them illustrates the nature of the bird, which I shall for that reason relate.

* Willoughby.

A Carrion Crow is fastened alive on its back firmly to the ground, by means of a brace on each side at the origin of the wings. In this painful posture the animal struggles and screams; the rest of its species flock to its cries from all quarters, with the intention, as it were, to afford relief. But the prisoner, grasping at every thing within reach to extricate himself from his situation, seizes with his bill and claws, which are left at liberty, all that come near him, and thus delivers them a prey to the bird-catcher *. They are also caught with cones of paper baited with raw flesh; as the Crow introduces his head to devour the bait, which is near the bottom, the paper, being besmeared with birdlime, sticks to the feathers of the neck, and he remains hooded, unable to get rid of this bandage, which covers his eyes entirely; he betakes to flight, rises almost perpendicularly into the air, the better to avoid striking against any thing, till quite exhausted, he sinks down always near the spot from which he mounted. In general, though the flight of the Carrion Crows be neither easy nor rapid, they mount to a very great height, where they support themselves long, and whirl much.

This species has, like the Raven, varieties of white †, and of white mixed with black ‡, but which have the same instincts.

* Gesner.

† Schwenckfeld and Salerne.—Briffon adds, that they have also the bill, the feet, and the nails white.

‡ Frisch.

Frisch

Frifch fays that he once faw a flock of fwallows travelling with a troop of variegated Crows in the fame direction. He adds, that thefe pafs the fummer on the coafts of the ocean, fubfifting on what the waves caft afhore; that in autumn they migrate to the fouth, never in large bodies, but in fmall divifions at certain intervals from each other; in which circumftance they refemble the Black Common Crows, of which they feem to be only a permanent variety.

It is very probable that the Crows of the Maldivas, mentioned by Francis Pyrard, are of the fame kind; fince that traveller, who faw them very diftinctly, remarks no difference. They feem however to be more familiar and bolder than ours; for they entered houfes to pick up whatever futed them, and often the prefence of a man did not difcompofe them. Another traveller fays, that thefe Indian Crows, when they can get into a chamber, delight in doing all the mifchievous tricks that are afcribed to monkeys; derange the furniture, and tear it with their bills, overturn lamps, ink-ftands, &c.*

Laftly, according to Dampier, there are in New Holland and New Guinea † many Carrion Crows which refemble ours. There are alfo fome in New Britain; but it would feem, that

* *Voyage d'Orient*, du Pere Philippe de la Trinite, p. 379.

† According to this navigator the New Guinea Crows differ from ours only by the colour of their feathers, of which all that appears is black, but the ground white.

though

though there are many in France, England, and part of Germany * ; they are scarce in the north of Europe. Klein mentions that they are rare in Prussia. They must be very uncommon in Sweden, since not even the name occurs in the enumeration which Linnæus has given of the birds of that country. Father Tertre assures us also that they are not to be found at all in the Antilles; though, according to another traveller, they are very common in Louisiana. [A]

* *Page du Pratz*. Their flesh is more palatable, he says, than in France, because they do not feed upon filth, being hindered by the *carancros*, a kind of American vultures.

[A] Specific character of the Carrion Crow, *Corvus Corone*, LINN. "All of a sky-black, its tail rounded, its tail-quills sharp." Its length is eighteen inches, its breadth twenty-six. It is more frequent in England than in any other part of Europe.

M

The R O O K*.

Le Freux, ou La Frayonne, Buff.

Corvus Frugilegus, Linn. and Gmel.

Cornix Frugilega, Briss. and Klein.

Cornix Nigra Frugilega, Ray. Will. and Frisch.

THIS bird is of an intermediate size between the Raven and the Carrion Crow, and it has a deeper cry than them. What distinguishes it the most, is a naked white skin, scaly and sometimes scabby, that encircles the base of the bill, instead of those black projecting feathers, which in the other species of Crows extend as far as the aperture of the nostrils. Its belly is not so thick or strong, and seems, as it were, rasped. These differences, apparently so superficial, imply more radical distinctions.

The peculiarities of the Rook result from its mode of life. It feeds upon grain, roots, and worms; and as in search of its proper subsistence, it scratches deep in the ground with its bill, which in time becomes rough, the feathers at the base are worn off by the continual rub-

* In Greek, *Σπέρμολογος*, or seed-gatherer; which is also the meaning of the Latin name, *Frugilega*: in German, *Roeck*; whence the English name and the Swedish *Roka*: in Dutch, *Koore-Kraay*: in Polish, *Gawron*.

bing *. However, the straggling feathers are perceived there; a sufficient proof that the bird is not naturally bald.

The appetite of the Rook is confined to grain, worms, and insects; it never prowls in the kennel, nor eats any sort of flesh: it has also the muscular ventricle and the broad intestines of the granivorous tribe.

These birds fly in numerous flocks, which are sometimes so immense as to darken the air. We may conceive what havock these hordes of reapers will commit on newly-sown fields, or on crops nearly ripe. Accordingly, in some countries government has interfered †. The British Zoology vindicates them from the aspersions, asserting that they do more good than harm, by destroying the caterpillars that gnaw the roots of the useful plants, and blast the honest

* Daubenton the younger, keeper and demonstrator of the cabinet of natural history, made an observation lately in a jaunt to the country, which relates to the present subject. This naturalist, to whom ornithology already owes so much, saw, at a distance, in a field entirely uncultivated, six Crows of which he could not distinguish the species, which seemed very busy lifting and turning over the stones that were scattered here and there, to get the worms and insects lodged under them. They went so briskly to work, that they made the smaller stones spring two or three feet. If this singular exercise, which no person before has attributed to the Crows, be familiar to the Rooks, it will afford another reason for the wearing and dropping of the feathers that encircle the base of their bill. In that case the name *turnstone*, now applied to a single species of bird, might become generic.

† Aldrovandus.

labours of the husbandman. It would require a calculation to decide the point.

But not only the Rooks fly in flocks, they also nestle in company, as it were, with those of their own species; and their society is very clamorous, especially when they have young. Ten or twelve nests are sometimes found on the same tree, and a great number of trees thus furnished occur in the same forest, or rather in the same district *. They seek not retirement and solitude, but rather prefer settling near our dwellings. Schwenckfeld observes, that they commonly prefer the large trees planted round cemeteries; because perhaps these are frequented spots, or afford worms in greater plenty; for we cannot suppose that they are attracted by the scent of the dead bodies, since we have already said that they will not touch flesh. Frisch asserts, that if, in the breeding season, a person goes under the tree on which they are thus settled, he will instantly be deluged with their excrements.

One circumstance will appear singular, though very like to what happens every day among animals of a different species. When a pair are employed in constructing their nest, one must be left to guard it, while the other is procuring the suitable materials; without this precaution, it is alleged, the nest would in an instant be completely pillaged by the other Rooks which

* Frisch.

are settled on the same tree, each carrying off a sprig to its own dwelling.

These birds begin to build their nest in the month of March, at least in England*. They lay four or five eggs, smaller than those of the Raven, but marked with broader spots, especially at the large end. It is said that the male and female sit by turns. When the young are hatched, and able to eat, they disgorge their food, which they keep in reserve in their craw, or rather in a sort of bag formed by the dilatation of the œsophagus†.

I find in the British Zoology, that after their hatch is over, they leave the trees where they nested; and that they return not again till the month of August, and only begin to repair or rebuild their nests in October‡. This would shew that they continue almost the whole year in England; but in France, in Silesia, and in many other countries, they are undoubtedly birds of passage, if we except a few; the only difference is, that in France they announce the winter, while in Silesia they are the forerunners of the summer§.

The

* British Zoology.

† Willoughby.

‡ It is said that the herons take advantage of their absence to lay and hatch in their nests. ALDROVANDUS.

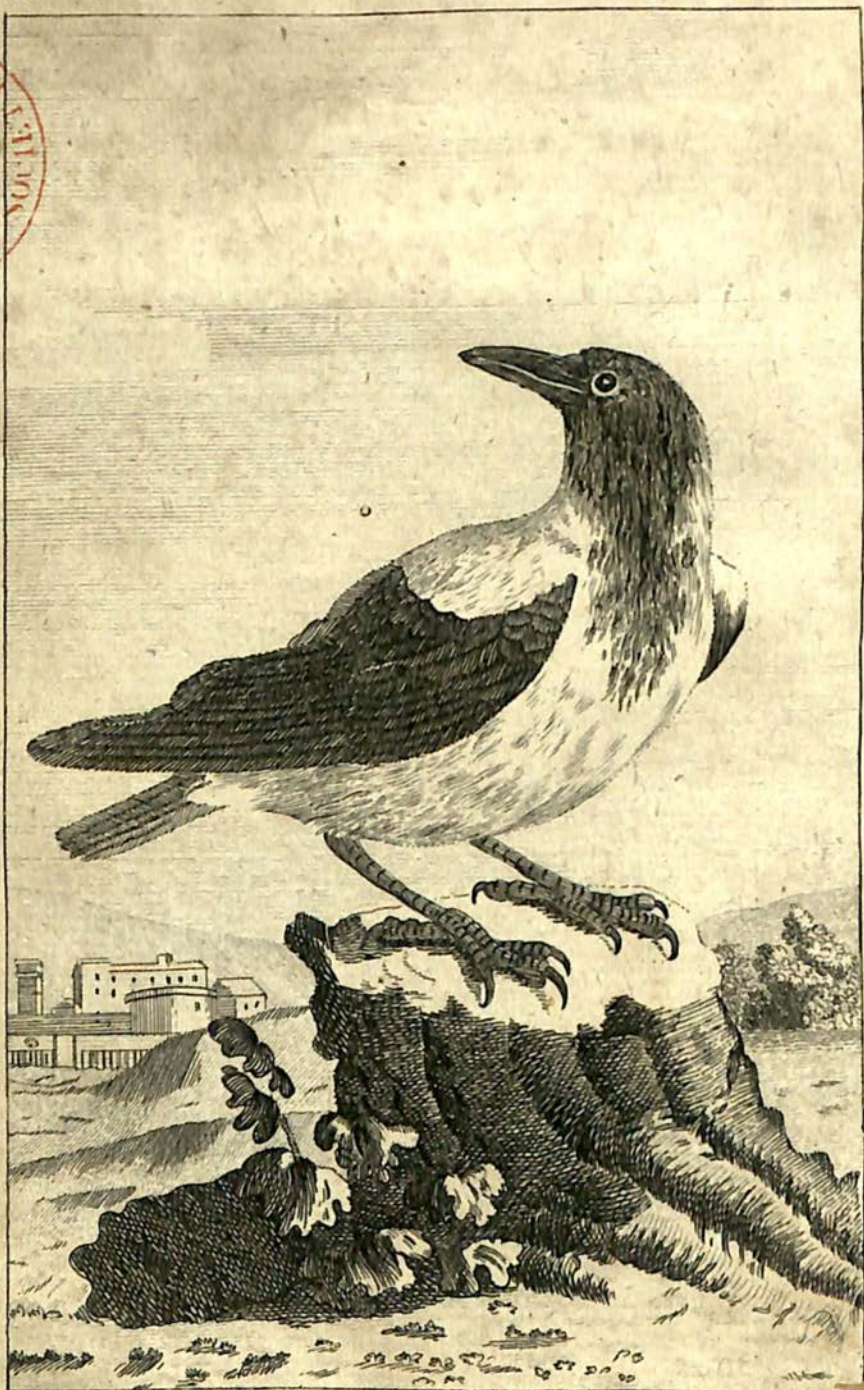
§ See Schwenckfeld, p. 243. At Baume-la-Roche, which is a village of Burgundy, a few leagues from Dijon, surrounded with mountains and craggy rocks, and where the air is sensibly colder than at Dijon, I saw repeatedly in summer a flock of Rooks which

The Rook is an inhabitant of Europe according to Linnæus; but it would appear that there are some exceptions, since Aldrovandus is of opinion that there are none in Italy.

It is said that the young ones are good eating, and that even the old ones are tolerable food when fat, but this is very rare. Country people have less aversion to their flesh, knowing that they subsist not on carcases, like the Ravens and the Carrion Crows. [A]

which had lodged and nested above a century, I am assured, in the holes of rocks facing the south west, and where it would be very difficult to get at their nests, and not without being let down by cords. These Rooks were so familiar that they ventured to steal the reapers' luncheons: they disappeared about the end of summer a couple of months only, after which they returned to their usual haunt. For these two or three years past they have not been seen, and their place was immediately occupied by the hooded Crows.

[A] Specific character of the Rook, *Corvus Frugilegus*, Linn. "Black, its front ash-coloured, its tail somewhat rounded." The Rooks are remarked to fly chiefly in the morning and the evening. The *erucæ* of the dor-beetle (*Scarabæus melolantha*, Linn.) are what they search for in the ground. They advance no nearer the pole than the south of Sweden.



THE ROYSTON CROW,

The HOODED-CROW.

Le Corneille Mantelée, Buff.

Corvus Cornix, Linn. and Gmel.-

Cornix Cinerea, Briss.

Cornix Cinerea Frugilega, Gefn. and Ald.

The Royston Crow, Ray. and Will. *

THIS bird is easily distinguished from the Carrion-Crow and the Rook by the colours of its plumage. Its head, tail, and wings are of a fine black, with bluish reflections; it is marked with a sort of scapulary of a greyish white, which extends both ways, from the shoulders to the extremity of the body. On account of this appearance, it has been called by the Italians, *Monacchia*, or *Nun*, and *Mantled Crow* by the French †.

It associates in numerous flocks, like the Rook, and perhaps is still more familiar with man, preferring, especially in winter, the vi-

* This species seems to have been unknown to the ancient Greeks and Romans. The moderns have given it the Latin appellations, *Cornix-Cinerea*, *Varia*, *Hyberna*, *Sylvestris*; *Corvus Semi-cinereus*: in Italian, *Mulacchia* or *Monacchia*: in Swedish, *Kraoka*: in Polish, *Vrona*: in German, *Holzkræ*, *Schildkræ*, *Nabelkræ*, *Bundtekræ*, *Punterkræ*, *Winterkræ*, *Afiskræ*, *Grauekræ* (i. e. Wood-Crow, Shield-Crow, Navel-Crow, Pied-Crow, Punctured-Crow, Winter-Crow, Ash-Crow, Grey-Crow).

† The name *Hooded-Crow* is common in Scotland. SIBBALD.

cinity of our farms and hamlets, and picking up its food in the kennels and dunghills, &c.

Like the Rook also, the Hooded-Crows change their abode twice a-year, and may perhaps be considered as birds of passage; for we annually perceive immense flocks arrive near the middle of autumn, and depart about the beginning of spring, shaping their course towards the north; but we are uncertain where they stop. Most authors assert, that they pass the summer on the lofty mountains*, and build their nests in the pines or firs; it must therefore be on mountains uninhabited and little known, as in those of the Shetland isles, where they are actually said to breed†. In Sweden also‡, they nestle in the woods, especially among the alders, and lay commonly four eggs; but they never settle in the mountains of Switzerland, of Italy§, &c.

Though, according to most naturalists, it lives on every sort of food, worms, insects, fish||,

* Aldrovandus, Schwenckfeld, and Belon.

† British Zoology. The authors of that work add, that it is the only species of Crow found in those islands.

‡ Fauna Suecica.

§ Aldrovandus.

|| Frisch says, that they are expert at picking fish-bones, and that when water is let out from pools, they quickly perceive the fish that are left in the pool, and lose no time in catching them. It is easy, therefore, to perceive that the Hooded-Crows may often frequent the sides of water; but this was no sufficient reason for terming them aquatic or marine crows.

and even putrid flesh, and, above all, on the products of milk*; and though these facts would rank it among the omnivorous tribe, yet as seeds of various kinds, mixed with small stones, are found in its stomach†, we may infer, that they are the nearest allied to the granivorous species; and this is another trait in their character common to the Rook. In other respects, they resemble much the Carrion-Crow; they have nearly the same size, the same port, the same cry, and the same flight; the structure of their tail, wings, bill, and feet; the disposition of their internal parts, are exactly the same‡; and if any difference can be perceived, they incline to the nature of the Rook. They often associate together, and nestle on the trees§; both lay four or five eggs, eat those of small birds, and sometimes devour the helpless animals themselves.

* Aldrovandus. † Gesner and Ray. ‡ Willoughby.

§ Frisch remarks, that they place their nest sometimes on the tops of trees, and sometimes on the lower branches; which would imply, that they sometimes breed in Germany. I have lately ascertained that they nestle sometimes in France, and particularly in Burgundy. A flight of these Crows has resided constantly, for two or three years past, at Baume-la Roche, in certain holes of rocks, possessed above a century by Rooks. One year, these Rooks not having returned, a flock of fifteen or twenty Hooded-Crows immediately occupied their scite, have since had two hatches, and are at present (26th May 1773) engaged with a third. This is another analogous feature of the two species.

Analogies so striking to the Carrion-Crow and the Rook, would lead us to suspect that the Hooded-Crow is only the hybridous offspring of these two species. If it were only a variety of the Carrion-Crow, why does it fly in flocks, and shift its abode twice a-year *? or, if it were merely a variety of the Rook, whence those numerous relations which it bears to the Carrion-Crow? But this double resemblance will be easily explained, if we admit it to be a cross-breed, participating of the qualities of both. This opinion would appear plausible to philosophers who are accustomed to trace physical analogies; but it derives additional probability from the consideration that the Hooded-Crow is a new family, entirely unknown to the ancients.

Frisch says, that the Hooded-Crow has two cries; the one hollow and well-known, the other shrill and somewhat resembling the crowing of a Cock. He adds, that it is ardently attached to its young, and that if the tree on which its nest is built be cut down, it will fall with it, rather than abandon its offspring †.

* "The Raven and Crow are always seen, and never migrate or abscond." ARISTOTLE *Hist. Anim.* lib. ix. 23.

† A similar story is told by White, in his "Natural History and Antiquities of Selborne." A pair of Ravens had, for a course of years, been accustomed to breed in an ancient oak: the tree was cut down in the month of February, when the birds were sitting, and the dam was crushed by the fall.

Linnaeus seems to apply to this bird what is said in the British Zoology with respect to the Rook, that it is useful in destroying destructive insects. But do they not themselves destroy more grain than the insects which they extirpate? In many parts of Germany a price is set on their head *.

They are caught in the same snares as are the other Crows. They are found in all the countries of Europe, but at different times. Their flesh has a strong smell, and is little used, except by the lower sort of people.

I know not for what reason Klein ranged the *Hoexototol*, or the Willow-Bird of Fernandez, among the Crows, unless on the assertion of Seba, who, describing this bird as the same with that mentioned by Fernandez, makes it as large as an ordinary pigeon, while Fernandez, in the very place quoted by Seba, says that the *Hoexototol* is a small bird of the size of a sparrow, having the song of the goldfinch, and being good eating †. This is not much like a Crow, and such mistakes, which are so pregnant in Seba's work, must only throw confusion into the nomenclature of natural history. [A]

* Frisch.

† The Crows must be widely scattered, since they appear in the beautiful series of birds which Sonnerat has brought from India, the Molucca islands, and the land of the Papoux. The individual mentioned in the text came from the Philippines.

[A] Specific character of the Hooded-Crow, (*Corvus Cornix*, Linn.): "Ash-coloured, its head, throat, wings, and tail black.

It weighs twenty-two ounces ; its length twenty-two inches, its alar extent twenty-three. It is a bird of passage in Great Britain, appearing in the beginning of winter, and returning with the Woodcocks. It is found as far north as the Feroe islands and Lapmark, where it continues the whole year, but chiefly on the sea-coast, subsisting on shell-fish. Its toes are very broad and flat, which enables it to walk on marshy grounds."

M

FOREIGN BIRDS, WHICH ARE RELATED TO THE CROWS.

I.

The SENEGAL CROW.

Corvus Dauricus, Gmel. and Pallas.

The White-breasted Crow, Lath. and Kolben.

TO judge of this from its shape and colours, which is all that we know of it, we should suppose it most analogous to the Hooded-Crow, and differing only because its white scapulary is not so much extended. Some distinctions are also perceived in the length of its wings, the shape of its bill, and the colour of its feet. It is a new species, and little known *.

* This bird is described in Pallas's Travels, and Gmelin thus states its specific character: " It is black, its nape whitish, its neck and breast white." It is of the size of the Jackdaw, being twelve inches long. It arrives in numerous flocks early in the spring, in the neighbourhood of Lake Baikal, from China and the southern parts of the Mogul Empire.

II.

The JAMAICA CROW.

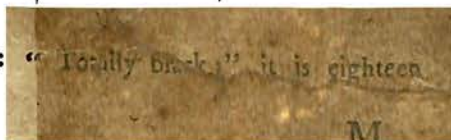
Corvus Jamaicensis, Gmel.*Cornix Jamaicensis*, Briss.*The Chattering-Crow, or Cacao-Walk*, Ray, Sloane, and Lath.

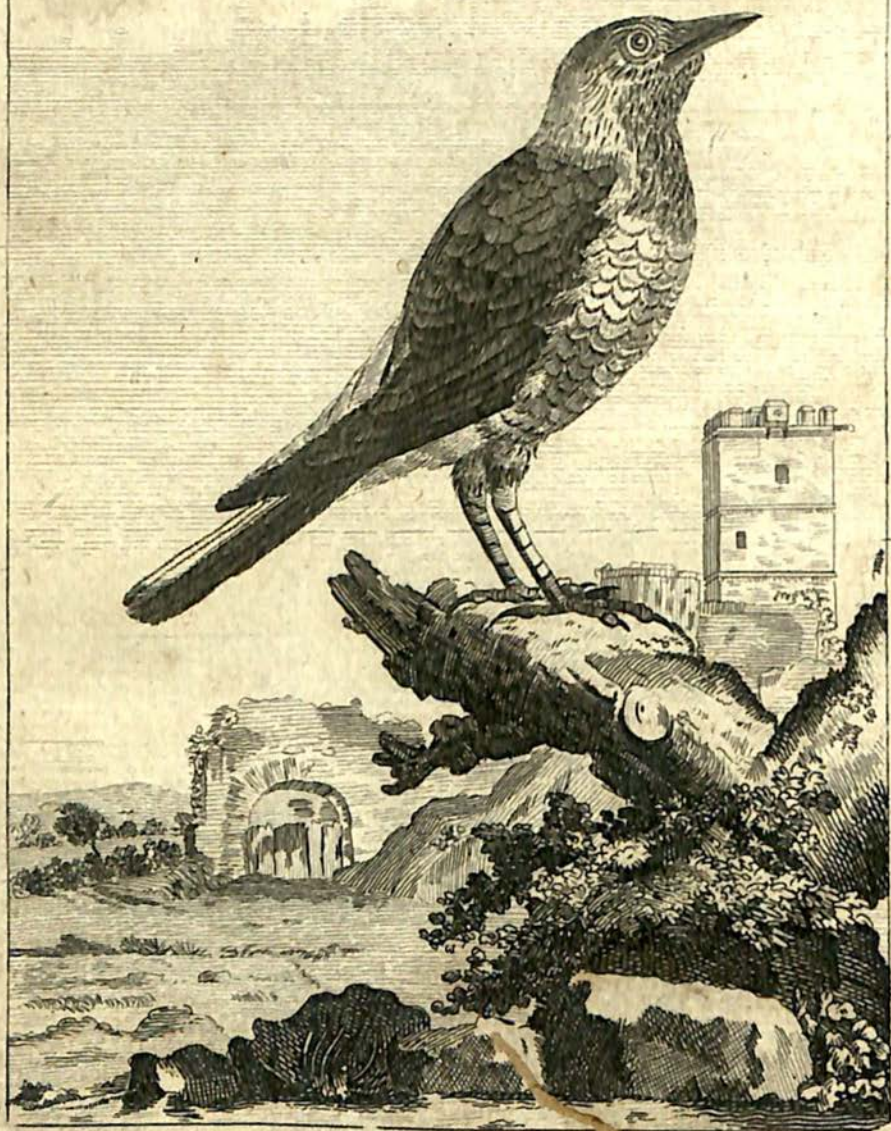
This foreign Crow seems to be modelled from ours, only its tail and feet are smaller; its plumage is black, like that of the Carrion-Crow. In its stomach are found red berries, grain, and caterpillars; which shews that its ordinary food is the same with that of our Rook and our Hooded-Crow. Its ventricle is muscular, and lined in the inside with a very strong coat. This bird abounds in the southern part of the island, and never leaves the mountains, in which respect it resembles our Raven.

Klein characterises this species by the largeness of its nostrils; but Dr. Sloane, whom he quotes, says only, that they are moderately large.

It is obvious that it belongs to the Crows; but it would be difficult to refer it to any one species, since it unites the qualities proper to each, and differs from them all by its continual chattering. [A]

[A] Specific character: "Totally black." It is eighteen inches long.





THE JACKDAW.

The JACK DAW S.

Les Choucas, Buff.

Corvus-Monedula, Linn. and Gmel,

Cornix Garrula, Klein.

Graculus, seu *Monedula*, Gefner.

Monedula, seu *Lupus*, Aldrov. Ray, and Briff.

The Kae, Sibbald *.

THESE birds are nearly related to the Crows; to institute a comparison between them would therefore throw light on the history of both. As there are three species of Crows, the black (the Carrion-Crow), the cinereous (the Hooded-Crow), and the bald (the Rook); so there are three corresponding ones among the Jackdaws: a black one (the Daw, properly so called); a cinereous (the Chough); and a bald. The only difference is, that the last is of America, and has little black in its plumage. In general the Jackdaws are smaller than the Crows; their cry, at least that of the two European species, the

* In Greek, Λυκος, Κολιος, Βυμολεχος: in Latin, *Lupus*, *Graculus*, *Monedula*, (which Scaliger derives from *moneta*, a coin, on account of this bird's disposition to pilfer): in Spanish, *Graio*, *Graia*: in Italian, *Giagula*, *Tattula*, *Pola*: in German, *Thal-Dahl*, *Thale* or *Dable*, *Thaleche* or *Dablike*: in Saxon, *Aelcke*, *Kaeyke*, *Gacke*: in Swiss, *Graake*: in Dutch, *Kaiv*: in Flemish, *Gaey*, *Hannekin*: in Swedish, *Kaja*: in Turkish, *Tschauka*.

only

only kinds known to us, is shriller, and has influence in the forming of their names; such as *Choucas*, *Graccus*, *Kaw*, *Kae*, &c. But it appears that they have more than one inflexion of voice; for I am assured that they sometimes call out *tian*; *tian*, *tian*.

They live upon insects, grain, fruits, and even flesh, though very rarely; but they will not touch filth, nor do they haunt the coasts to pick up the dead fish and other carcases that are cast ashore by the sea *. In this circumstance they resemble more the Rook, and even the Hooded-Crow, than the Carrion-Crow; but they approach the latter by the habit of searching and hunting for partridge eggs, of which they destroy great numbers.

They fly in large flocks, like the Rooks; like these, too, they form a sort of cantonments, which are even more numerous, consisting of a multitude of nests crowded upon one another, in a large tree, in a belfry, or in the ruins of an old deserted castle †. The male and female, when once paired, remain a long time steadily united. When the genial season returns, which awakens the sensibility of the animal frame, they eagerly court each other's society, and prattle incessantly; they toy and kiss, till they are worked up to a

* Aldrovandus.

† Belon, Aldrovandus, and Willoughby. They prefer the holes of trees to the branches.

fury which can no longer be satisfied with the calmer joys: nor do they omit these preliminaries when reduced to the state of captivity*. After fecundation, the female lays five or six eggs, marked with a few brown spots on a greenish ground; and, after the young are hatched, she watches, feeds, and rears them with an affection which the male is eager to share. In this respect the Jackdaw resembles the Crows, especially the common sort: but Charleton and Schwenckfeld assert that it has two hatches in the year; which has never been affirmed of any of the Crows, though it well corresponds to the order of nature, the small species being always the most prolific.

The Jackdaws are birds of passage, though they are not so well entitled to that appellation as the Rooks and Hooded-Crows, since a number of them continue in the country through the summer. The towers of Vincennes are at every season stocked with them, and so are all old buildings which afford the same convenience and shelter; but in France there are always fewer in summer than in winter. Those which migrate, form themselves into great bodies, like the Rooks and the Hooded-Crows; sometimes they join the same army, and continually chatter as they fly: yet they keep not the same periods in France as in Germany; for they leave Ger-

* Aristotle, *de Generatione*, lib. iii. 6.

many in autumn with their young, and appear not again till the spring; after having wintered with us; and Frisch was right in maintaining that they do not hatch during their absence; since neither the Jackdaws nor other birds breed in winter.

With respect to their internal structure, I shall only observe that they have a muscular ventricle, and near its superior orifice a dilatation of the œsophagus, which serves in place of a crop, as in the Crows, but that the gall-bladder is more elongated.

They can be easily tamed and taught to speak. They seem fond of the domestic state; but they are faithless servants, concealing the food which they cannot consume, and secreting bits of money and jewels.

To complete the history of the Jackdaws, we have only to compare together the two kinds which are natives of Europe, and afterwards subjoin, as usual, the foreign species and varieties.

THE COMMON JACKDAW * is of the size of a pigeon; its iris is whitish, it has some white streaks under its throat, some dots of the same colour round its nostrils, and some of an ash colour on the hind part of the head and neck; the rest is entirely black, which is deeper, how-

* *Chucas*, Buff.

ever, on the upper parts, and glossed sometimes with violet, sometimes with green.

THE CHOUGH * differs from the preceding, in being rather smaller, and perhaps less common; its iris is bluish, as in the Rooks; the prevailing colour of its plumage is black, without any cinereous mixture, and small white points are observed round its eyes. But in every other respect they are exactly alike, and there is no reason to doubt that they belong to the same species, and would breed together.

We need not be surprised that birds so nearly related to the Crows, should present the same varieties. Aldrovandus saw in Italy a Jackdaw with a white collar; this is probably the same with what is found in many parts of Switzerland, and which for this reason the English call the *Helvetian Daw* †.

Schwenckfeld had occasion to see a white Daw, with a yellowish bill. These white Daws are more common in Norway and the cold countries; in the temperate climates even, as in Poland, a small white Daw is sometimes found in the nest of the black Daws or Choughs ‡: in this case the colour of the plumage does not depend on the

* *Chouc*, BUFF. This is the *Monedula Nigra* of Brisson, which Linnæus makes to be a variety of the Common Jackdaw, *Corvus Monedula*.

† The *Monedula-Torquata* of Brisson, which Linnæus regards as a variety. The *Collared-Jackdaw* of Latham.

‡ Rzaczynski.

influence of climate, but arises from a natural defect; in the same way as white Ravens are bred in France, and white Negroes born in Africa.

Schwenckfeld speaks: 1st, of a variegated Daw, which resembles the true Jackdaw, except that its wings are white, and its bill hooked.

2. Another Daw, which is very rare, and differs from the common kind in its being crossed*. But these are, perhaps, individual varieties, or monstrous productions. [A]

* I had this year, in my court-yard, four tufted hens, of a Flemish breed, which had the bill crossed; the upper mandible was very hooked, and at least as much so as in the cross-bill itself; the lower was almost straight. These hens could not feed on the ground so well as others; it was necessary that grain should be laid of a considerable thickness.

[A] Specific character of the Jackdaw, *Corvus Monedula*, LINN. ‡
 “It is dusky, the back of its head hoary, its wings and tail black.” The Jackdaw weighs nine ounces; its length thirteen inches, and its breadth twenty-eight: It is found as far north as Sondmor, and sometimes in the Feroe islands; it leaves Smoland and East Gothland immediately after harvest, and returns in the spring with the staves.—Mr. White, in his Natural History of Selborne, relates a singular fact: That, in a neighbouring warren, the Daws sometimes breed under ground in the rabbit-burrows.



THE ALPINE CROW.

The A L P I N E D A W *.

Le Choquard, ou Choucas des Alpes, Buff.

Corvus-Pyrrhocorax, Linn. and Gmel.

Pyrrhocorax, Gefner, and Aldrovandus.

The Alpine Crow, Lath.

PLINY calls this bird *Pyrrhocorax*, which name alone includes an abridged description. *Korax*, which signifies Crow, marks the blackness of its plumage, as well as the analogy of its species; and *pyrrhos*, which means rufous or orange, denotes the colour of its bill, which, in fact, varies between yellow and orange; and also that of its feet, which are still more variable, since they were red in the subject examined by Gefner, and black in the one described by Brisson. That author mentions also their being sometimes yellow, and others relate that they are yellow in winter, and red in summer. These yellow feet and bill, which last is smaller than that of the Jackdaw, have made it be taken for the Blackbird, and termed the Great Alpine Blackbird. But if we draw a comparison, we shall find that it approaches much nearer to the Jackdaws, by the size of its body, the length of its

* In Swifs, *Alpkachtel, Wildtut* (*Alp-kae, Wild-Daw*): in German, *Bergdol, Alprapp*, (*Mountain-Daw, Alp-Raven*).

wings, and even the shape of its bill, though slenderer, and by its nostrils being covered with feathers, which are thinner, indeed, than in the Jackdaws.

In the article of the Red-legged Crow, or Cornish Chough, I have stated the difference between these two birds; which Belon, and some others who have not seen them, have confounded together.

Pliny believed the *Pyrrhocorax* to be of the Alps*; but Gefner, who has accurately pointed out the distinction, between it and the Red-legged Crow, says, that in certain parts of the country of the Grisons, this bird does not appear in winter; and in other parts that it is seen nearly the whole year, but that its favourite residence, where it settles in numerous flocks, is the summit of lofty mountains. These facts restrict somewhat the opinion of Pliny, but at the same time they confirm it.

The Alpine Daw is of a middle size, between the Jackdaw and the Carrion-Crow: its bill is smaller, and more arched, than either; its cry is shriller, and more plaintive than the Jackdaw, and by no means agreeable †.

* *Hist. Nat.* lib. x. 48.

† Schwenckfeld says, that the *Pyrrhocorax*, which he terms also the *Night-Crow*, is noisy, especially during the night, and seldom appears in the day; but I am not certain if Schwenckfeld means the same bird as I do, by that name.

It lives chiefly upon grain, and is very destructive among the crops; its flesh is very indifferent eating. The inhabitants of the mountains draw meteorological predictions from its manner of flying; if it rises aloft, they lay their account for cold; if it keep near the surface, they expect mild weather. [A]

[A] Specific character of the *Corvus-Pyrrhocorax*, LINN.:
 "It is blackish, its bill yellowish, its feet black." It is fifteen inches long.

M

FOREIGN BIRDS, WHICH ARE RELATED TO THE JACKDAWS.

I.

The MUSTACHIO DAW.

Corvus Hottentottus, Linh. and Gmel.

Monedula Capitis Bonæ Spei, Briss.

The Hottentot Crow, Lath.

THIS bird is nearly the size of the Blackbird ; its plumage is of a glossy black, like the Jackdaw's ; and its tail is proportionably longer than in any of them ; all the feathers which compose it are equal, and the wings, when closed, do not extend half its length ; the fourth and fifth are the longest of all, reaching two inches and a half farther than the first.

There are two circumstances to be remarked in the exterior of this bird : 1. Those long and flexible black hairs which arise from the base of the upper mandible, and which are twice as long as the bill ; besides many other hairs, shorter and stiffer, and pointing forwards, and spreading over this same base, as far as the corners of the mouth. 2. Those long and narrow feathers in-
serted

serted in the upper part of the neck, which play on the back, and form a sort of mane*.

* Specific character : " It is greenish black, its tail equal, with very long mustachios." Its length is eleven inches and a quarter.

II.

The B A L D - D A W.

Corvus Calvus, Gmel.

The Bald-Crow, Lath.

This singular Daw corresponds to the Rook : the anterior part of its head is bare as in the Rook, and its throat is only shaded with a few straggling feathers. Its relation to the Daws in general is marked by the length of its wings, the shape of its feet, its port, its bulk, and its wide nostrils, which are almost round. But it differs because its nostrils are not covered with feathers, and are placed in a deep cavity on either side of the bill, and also because its bill is broader near the base, and scalloped at the edges. I can say nothing with respect to its history. It has not even received a name in any treatise of ornithology. It is a native of Cayenne †.

† Specific character : " It is dusky-ferruginous, its front and top bald." It is rather larger than the Jackdaw, being thirteen inches long.

III.

The NEW GUINEA DAW,

Corvus Novæ Guineæ, Gmel.*The New Guinea Crow.*

The natural place this bird ought to occupy is between our Daws and what I call *Colnud*. It has the figure of the Daws, the grey plûmage of one of them, at least, on the upper part of the body; but it is not so large, and its bill is broader in the base, in which it resembles the *Colnud*. It differs from the last by the length of its wings, which reach almost to the end of its tail, and from the *Colnud* and the Daws by the colours of the under-side of the body, which consist of black and white stripes, that extend to the wings, and which bear some resemblance to those in the variegated Wood-pecker*.

* The specific character of this bird includes a full description, which would only be an unnecessary repetition of the text, and is therefore omitted.

IV.

The PAPUAN DAW.

*Le Choucari de la Nouvelle Guinée, Buff.**Corvus Papuensis, Gmel.**The Papuan Crow, Lath.*

The prevailing colour of this bird (for we know only its surface) is an ash-grey, deeper in the upper side, and lighter in the under, and diluting, by degrees, almost to white under the belly and the parts adjacent. There are only two exceptions to this uniformity of plumage: 1. A black ring, which surrounds the base of the bill, and extends as far as the eyes. 2. The great quills of the wings, which are of a blackish brown.

In this bird the nostrils are, as in the preceding, entirely covered with white feathers; the bill is nearly similar, except that the ridge of the upper mandible is not round as in the Jackdaws, but angular as in the *Colnuds*. It bears other relations also to the last, and resembles it in the proportions of its wings, which extend no farther than the middle of its tail; in the smallness of its feet, and in the shortness of its nails. In short, we cannot hesitate to place it, as well as the preceding, between the Jackdaws and the *Colnuds*. Its length, reckoning from the point of the bill to the extremity of the tail, is about thirteen inches.

We owe this new species, as well as the preceding, to Sonnerat *.

* Specific character: "It is cinereous, its belly white, its wing-quills dusky blackish."

V.

The. CAYENNE COLNUD †.

Corvus Nudus, Gmel.

The Bare-necked Crow, Lath.

I rank this bird after the Daws, though it differs from them in some respects, because it is certainly more analogous to these, than to any birds of our continent.

Like No. II. it has a very broad bill at the base, and resembles it also in another respect, in being bald; but this is in a different way, the neck being almost naked and featherless. Its head is covered from the nostrils inclusively, with a sort of black velvet cap, consisting of small straight feathers, short, interwoven, and very soft to the feel; these are more straggling under the neck, and much more so under the sides and in the hind part.

The Colnud is nearly of the size of our Jackdaws, and we may add that it wears their livery; for its plumage is entirely black, except

† i. e. *Naked-Neck*.

some of the coverts and the wing-quills, which are of a whitish grey.

To look at the feet of the one which I observed, one would suppose that the hind-toe was forcibly turned back; but this is its natural position, and it can be directed forward occasionally, as in the martins. I have even remarked that it is connected with a membrane to the inner toe in each foot. It is a new species*.

* Specific character: "It is black, having a cape waved with soft feathers, its neck thinly covered with feathers."

VI.

The PHILIPPINE BALICASE †.

Corvus-Balicassius, Gmel.

Monzdula Philippensis, Briss.

The Philippine Crow, Lath.

I cannot prevail upon myself to give this bird the appellation of a Daw, as Brisson has done; since, from his description even, it appears to differ widely from them. Its wings extend only fifteen or sixteen inches, and it is scarcely larger than a Blackbird: its bill is thicker and longer in proportion than in any of the European Jackdaws; its feet slenderer, and its tail forked;

† In the Philippines it is called *Bali-Cassio*.

lastly,

lastly, instead of the shrill gloomy cries of the Jackdaws, it has a soft pleasant song. Such differences would lead us to expect many more, when the bird is better known.

Its bill and feet are black; its plumage of the same colour, with green reflections; its colour, at least, is the same, therefore, with that of the Jackdaw*.

* Specific character : " It is of a greenish black, its tail forked."

N^o 63



THE MAGPIE.

The M A G P I E*.

La Pie, Buff.*Corvus-Pica*, Linn. and Gmel.*Pica Varia* & *Caudata*, Gefner, and Aldrov.*Pica Rusticorum*, Klein.*The Magpie*, *Pianet*, or *Piot*, Will. Alb. &c.

THIS bird resembles the crow so much in external appearance, that Linnæus has classed them under the same genus; and Belon remarks, that if the tail of the Magpie was shortened, and the white removed from its plumage, it would be really a crow. In fact, the Magpie has the bill, the feet, the eyes, and the general shape of the crows and jackdaws; it has also many of their instincts and habits, for it is omnivorous, living on all sorts of fruits, and devouring even carrion †, robbing the small birds' nests of the eggs and the young, and seizing sometimes the parents, either by an

* In Greek, *Κισσα* or *Κισσα*, and on account of its variegated plumage, *Πικιδίς*: in Latin, *Pica*, *Cissa*, and according to some, *Aviis Pluvia*, (Rain-Bird); in wretched modern Latin, *Ajacia*: in Spanish, *Pega*, *Picata*, *Pigazza*; and in Catalonia, *Grassa*: in Italian, *Gazza*, *Ragazza*, *Aregazza*, *Gazzuola*, *Gazzara*, *Pica*, *Putta*: in German, *Aeloter*, *Atzel*, *Aegerst*, *Agerluster*: in Flemish, *Aexter*: in Polish, *Stroka*: in Swedish, *Skata*, *Skuira*, *Skara*: in Danish, *Skade*: in Norwegian, *Skior*, *Tunfugl*.

† KLEIN.—I saw one that ate greedily the skin of an orange.

open attack, or by surprising them while ensnared. One has been known to fall upon a blackbird, another to snatch a crab, but strangled by the closing of the claws, &c.*

Its fondness for live flesh has suggested the breeding it for falconry, like the ravens †. It commonly spends the warm season paired with its female, and engaged in hatching and breeding its young. In the winter it goes in flocks, and approaches the hamlets, where it has greater resources, which the severity of the season renders the more necessary. It is easily reconciled to the sight of man, soon grows familiar in the house, and at last becomes master. I knew one which passed a day and night among a crew of cats, which it was shrewd enough to command.

It prattles nearly like the carrion-crow, and learns to imitate the cries of animals, and even the human voice. One is mentioned which could exactly mimic the calf, the kid, the sheep, and even the notes of the shepherd's pipe: another repeated completely, the flourish of trumpets ‡. Willoughby knew many which
could

* ALDROVANDUS.—It occasions much disorder in the catching of birds by calls, and dares, so to say, the fowler in his hat.

† Frisch.

‡ Plutarch relates that a Magpie, which amused itself with imitating human discourse, the cry of animals, and the sound of instruments, having one day heard a flourish of trumpets, became mute all of a sudden, which surprised persons who had been accustomed

could pronounce whole phrases. *Margot* is the word commonly given them, because they can the most readily articulate it; and Pliny assures us, that this bird is very fond of that sort of imitation, is pleased with repeating the words it has learned, studies patiently and earnestly to recal those it has lost, is overjoyed with the discovery, and sometimes dies of vexation, if its recollection fails it, or if its tongue refuses to pronounce a hard word*.

The tongue of the Magpie is like that of the raven, for the most part black. It alights on the backs of hogs and sheep, like the jackdaw, and searches after the vermin which infest these animals; with this difference, however, that the hog receives its civilities with complaisance; but the sheep, no doubt more delicate and sensible, seems to dread it†. It also snaps, very dexterously, the flies and other winged insects which come in its way.

The Magpie can be caught by the same snares, and in the same manner with the carrion-crow, and it is addicted to the same bad habits of stealing and hoarding up provisions‡; habits

customed to hear it chatter incessantly; but they were much more surprised sometime after, when, quite unexpectedly, it broke silence, not to repeat its usual lesson, but to copy the notes and modulations of the trumpets. PLUTARCH.

* *Hist. Nat. lib. x. 42.*

† Salerne.

‡ I have verified this fact, by scattering before a tame Magpie pieces of money and little bits of glass. It was discovered also, that they

habits almost ever inseparable in the different species of animals. It is imagined also to forebode rain, when it chatters more than usually *. On the other hand, many circumstances concur to separate it from the crows.

It is much smaller than even the jackdaw, not weighing more than eight or nine ounces; its wings are shorter, and its tail longer in proportion, and hence its flight is neither so lofty, nor so well supported. It never undertakes distant journies, but only flies from tree to tree, or from steeple to steeple. When on the ground, it is in a continual flutter, hopping as much as walking, and briskly wagging its tail. It shews, in general, more restlessness and activity than the crows; it is more malicious, and is disposed to a species of raillery †. The female accordingly displays greater art and contrivance in the construction of her nest; whether because she is more ardent for the male ‡, and therefore more attached to its young, or because she is aware that many birds of rapine

they conceal their theft with such great care, that it was sometimes difficult to make a detection; under the bed, for instance; or between the quilts.

* Aldrovandus.

† “ I once saw a Magpie flying towards a bird, which happened to be tied to some place; and as it was reaching to eat a bit of flesh, the Magpie removed the morsel with its tail. I thence concluded that the Magpie delights in tantalizing other birds.” *Avicenna apud Gesnerum.*

‡ The ancients had this idea; for, from the name of the Magpie *Kioco*, they formed the verb *κισσομαι*, to desire.

are

are forward to plunder its eggs and its brood, and, besides, that some of them are prompted to retaliate. She places her nest on the tops of the loftiest trees, or, at least, on high bushes *, and, with the assistance of the male, strengthens it on the outside with flexible twigs and worked mud, and environs the whole with a basketing of small thorny branches closely entangled, leaving only in the thickest and most accessible side, a small hole for entering. But not contented with safety alone, she seeks convenience; she lines the bottom of the nest with a sort of round mattresses †, on which the young repose soft and warm; and though this lining, which is the true nest, be only six inches in diameter, the whole mass, including the thorny embasure, is at least two feet every way.

But all these precautions are not sufficient to remove her anxiety and apprehensions: she is

* It commonly builds in the skirts of woods or on vineyards.

† “ The Blackbird and Magpie spread a bedding under their young.” ARISTOTLE, *Hist. Anim.* lib. ix. 13. I take this opportunity to observe, that many writers have thought that the *Κύρρα* of Aristotle is the same with our jay, because the *Κύρρα* is described to hoard up acorns, which are the principal food of the jay; but it is admitted that this food is common to both the jay and the Magpie; and there are two characters peculiar to the jay, which Aristotle could not fail to have observed, viz. the two blue marks on the wings, and the sort of crest which the bird makes by occasionally bristling the feathers on the head. Since Aristotle is silent on these particulars, I conjecture that his Magpie and ours are the same bird, and likewise the long-tailed variegated Magpie which was new at Rome, and rare even in the time of Pliny. *Lib. x. 29.*

perpetually on the watch; if she perceive a crow to approach, she flies immediately to meet him, harasses him, and pursues him to a distance*. If the enemy be more formidable, a falcon for instance, or an eagle, yet will not fear restrain; she rushes on danger with a temerity which is not always crowned with success. Her conduct must sometimes, however, be more considerate, if we believe what is alleged, that when she sees a person spying her nest with too envious an eye, she transports the eggs to some other place, either between her claws, or in a way still more incredible†. Sportsmen tell stories no less strange about her skill in arithmetic, though her knowledge extends not beyond the number five‡.

She lays seven or eight eggs at each hatch, and breeds only once a year, unless the nest be destroyed or deranged, in which case she constructs another, and both parents exert them-

* Frisch.

† “To the underside of a twig they glue two eggs with their excrements, and, having taken the burthen on their neck, they transport it thus equally poised.” *PLINY, lib. x. 33.*

‡ Sportsmen say, that if a Magpie sees a man enter a hut built at the foot of the tree on which it breeds, it will not go into its nest till it has perceived the man leave the hut; that if two enter, and only one comes out, it will not be deceived by the stratagem, but will stay till the second also comes out; that it will likewise distinguish three out of four, and even four out of five, beyond which it cannot discriminate. It would thence follow, that the Magpie has a distinct idea of the series of numbers, from one to five; and it must be confessed that the glance of a man's eye is not perhaps more accurate.

selves

selves with such ardour as to complete it in less than a day. They have afterwards a second hatch, consisting of four or five eggs; and if they be again disturbed, they will rebuild the nest, and make a third hatch, though still smaller than the preceding *. The eggs of the Magpie are never so large, or of so deep a colour, as those of the Raven; they are marked with brown spots, strewed on a blue-green ground, most crowded about the thick end. John Liebault, quoted by Salerne, is the only one who affirms that the male and female sit alternately.

The Magpies are hatched blind and shapeless, and it is some time before they assume their destined form. The mother not only rears them with an anxious care, but takes an interest in them after they are grown up. Their flesh is indifferent eating, though it is not held in such aversion as that of young crows.

With respect to the difference remarked in the plumage, I conceive it to be not absolutely specific; since, among the ravens, the crows, and the jackdaws, individuals are found variegated, like the Magpie, with black and white: we must admit, indeed, that in the former black

* Something of this kind has made the stratagem be imputed to the Magpie, of having constantly two nests, with a view to disappoint the birds of prey, by shifting from the one to the other. It was for the same reason that the tyrant Dionysius had thirty bed-chambers.

is the ordinary colour, as the mixture of white and black is in the latter. But this is not uniform; and if we examine the bird closely, or view it in certain lights, we may perceive shades of green, purple, and violet, though not expected in a bird so little celebrated for beauty of plumage*. The male is distinguished from the female by the deeper blue gloss on the upper part of its body, and not by the blackness of its tongue, as some have alleged.

The Magpie is subject to moult, like the other birds; but it is observed, that the feathers drop successively and by degrees, except those on the head, which are detached all at once, so that at the annual return of the season it appears bald†. The young ones do not get their long tail before the second year; and, no doubt, this is the time when they become adult.

All that I can learn with respect to the duration of the life of the Magpie is, that Dr. Derham kept one twenty years, when it grew blind with age‡.

This bird is very common in France, England, Germany, Sweden, and in every part of Europe, except Lapland||; it is also rare in mountainous countries, which shews that it

* British Zoology. † PLINY, lib. x. 29. ‡ Albinus.

|| Fauna Suecica, No. 76. M. Hebert assures me, that no Magpies are seen in the mountains of Bugey, or even at the height of Nantua.

cannot support excessive cold. I shall close this account with a short description, which will illustrate what cannot be represented at all, or which the figure expresses imperfectly.

It has twenty quills in each wing, the first of which is very short, and the fourth and fifth the longest; twelve unequal quills in the tail, diminishing always in length, the farther they are from the two middle ones, which are the longest of all; the nostrils round; the internal eye-lids marked with a yellow spot; the edges of the chops beset with hairs; the tongue blackish, and forked; the intestines about twenty-two inches long; the *cæcums* half an inch; the *æsophagus* dilated and covered with glands at its junction with the ventricle, which is but little muscular; the kidney oblong; and the gall-bladder of the ordinary size*.

I have already said that there are white Magpies as well as white ravens; and though the principal cause of this change of the plumage is the influence of northern climates, as may be supposed of the white Magpie of Wormius†, which was brought from Norway, and even

* Willughby.

† *Museum Wormianum*, p. 293. "It was sent me from Norway, where two young ones of this kind were found in the nest. It is evidently, from its form, a Magpie, only of a white colour, and smaller, not being yet full grown. Its head appears smooth."

of some of those mentioned by Rzacynski* : I must confess, however, that they are sometimes found in temperate climates; for instance, the one caught some years ago in Sologne, which was entirely white, except a single black feather in the middle of its wings †; whether it had migrated from the northern countries to France, after having undergone this change, or was bred in France, and the change of colour owing to some accidental cause. We must say the same of the white Magpies that have sometimes been seen in Italy ‡.

Wormius remarks, that the head of his white Magpie was smooth and bare, because he probably saw it in the moulting season; which confirms what I have said with regard to the common Magpies.

Willughby saw, in the king of England's collection, Magpies of a brown or rusty colour, which may be esteemed a second variety of the ordinary sort. [A].

* "A white Magpie was hatched in the town of Comarn, in the Russian palatinate. . . . Five Magpies of the same colour were seen near Vialka. In Volhinia, not far from the township of Olika, another was found." RZACYNZKI, *Actuarium*, p. 412.

† Salerne.

‡ GERINI, *Storia degli Uccelli*, tom. ii, p. 41.

[A] Specific character of the Magpie, *Corvus-Pica*, LINN. : "It is variegated with black and white, its tail wedge-shaped." Its length is eighteen inches, its breadth only twenty-four. It is found also in the island of Madeira.

M

FOREIGN BIRDS, RELATED TO THE MAGPIE.

I.

The SENEGAL MAGPIE.

IT is somewhat less than ours; but its wings, being proportionably longer, are nearly of the same extent; its tail, on the contrary, is shorter, though of the same shape. The bill, the feet, and the nails, are black, as in the common Magpie; but the plumage is very different. It has not a particle of white, and all the colours are dull; the head, the neck, the back, and the breast, are black, with violet reflections; the quills of the tail and the great quills of the wings are brown. All the rest is blackish, with different degrees of intensity.

II.

The JAMAICA MAGPIE.

This bird weighs only six ounces, and is about a third smaller than the common Magpie,

which it resembles in its bill, its feet, and its tail.

The plumage of the male is black, with purple reflections; that of the female is brown, darker on the back and all the upper side of the body, and lighter under the belly.

They build their nest on the branches of trees. They are found in every part of the island, but are most numerous at a distance from the scene of bustle. After breeding, they quit their concealments, and in autumn they spread over the settlements in such prodigious multitudes, as sometimes to darken the air. They fly thus in flocks for miles, and wherever they alight, they occasion considerable damage to the planters. In winter, their resource is to crowd to the barn-doors. Such facts would lead us to suppose that they are frugivorous; but they have a strong smell, and their flesh is rank and coarse, and seldom eaten.

It follows from what I have said, that this bird differs from our Magpie, not only in its mode of feeding, in its size, and in its plumage, but is besides distinguished by its being able to continue long on wing, by its associating in numerous flocks, and by the rankness of its flesh. The difference of sex is attended with a still greater in the colours. In short, if we add that the common Magpie could not traverse the immense ocean which separates the two continents, and could not support the intense

tense cold of a northern passage, we may conclude the American Magpies to be analogous to ours, and their representatives in the new world, but not derived from the same common stock.

The *tesquizana* * of Mexico seems to bear a great resemblance to this Jamaica Magpie; since, according to Fernandez, its tail is very long, and its size is inferior to that of the stare; its plumage is of a glossy black; it flies in numerous flocks, which are destructive to the cultivated fields where they alight; it breeds in the spring, and its flesh is tough and rank. In a word, this bird might be considered as a sort of stare, or jackdaw; but if we except the plumage, a jackdaw with a long tail resembles much a Magpie.

It is quite different with respect to the *isana* † of Fernandez, which Brisson confounds with the Jamaica Magpie. The bill, indeed, the feet, and the plumage, have the same colours in both; but the *isana* is larger, and its bill is twice as long: besides, it prefers the coldest parts of Mexico, and in its instincts, its habits, and its cry, it resembles the stare. It would be difficult, I imagine, to trace these characters in

* I have formed this word by contraction for the Mexican *Texiquiaacazanatl*. Fernandez calls it also *Stare of Salt Marshes*, and the Spaniards, *Tordo* (thrush). This bird has a plaintive song. FERNANDEZ, *Hist. Avium Novæ Hispaniæ*, cap. xxxiv.

† *Id.* cap. xxxii. He calls it *Izanatl*; others, *Txitlaoztzanatl*.

the Jamaica Magpie of Catesby; and, if it must be referred to the same genus, it ought at least to be formed into a separate species. The authority of Fernandez, the only naturalist who has had an opportunity of viewing the bird, is surely of more weight than the artificial classification of a system-maker; and that experienced observer says, that it bore a stronger analogy to the stare than to the Magpie. However we may be deceived in a subject of this kind, where our information is drawn from imperfect descriptions and inaccurate figures; I shall add, that the ifana has a sort of jeering note, common to most of the birds termed American Magpies.

III.

The MAGPIE of the ANTILLES*.

Corvus Garibæus, Gmel.

Galgahis Antillarum, Briss.

Pica Cauda Indica, Ray.

The Persian Pie, Will.

The Carribæan Crow, Lath.

Brisson has classed this bird with the rollers, for no other reason that I can discover, except that in Aldrovandus's figure the nostrils are

* See *L'Histoire generale des Antilles*, tom. i. p. 258. — *Aldrovandus*, tom. i. p. 788.

naked,

naked, which Brisson reckons one of the characters of the roller: but, 1, we cannot with certainty infer from a figure, which Brisson himself considers as inaccurate, a property so minute that it would escape the notice of a designer. 2. To this we may oppose a remarkable character, which could not be overlooked, viz. the long quills in the middle of the tail, which Brisson considers as belonging exclusively to the Magpie. 3. The Magpie of the Antilles resembles ours in its cry, in its confident disposition, in its nestling on trees, in its sauntering by the margin of streams, and in the coarseness of its flesh*: in short, if we must rank it with the most analogous European birds, it ought to be placed among the Magpies.

It differs, however, by the excessive length of the two middle quills of the tail, which stretch six or eight inches beyond the lateral ones†; its colours are also different, the bill and

* *Hist. des Antilles.* The Magpie also walks by the sides of water, since it sometimes catches crabs, as we have already said.

† I do not mean the singular property ascribed to it by Aldrovandus, that there are only eight quills in the tail: that naturalist counted them only in a coloured figure, a very uncertain method of judging. Father Dutertre, indeed, repeats the same thing; but most probably he copies Aldrovandus, with whose *ornithology* he was well acquainted, since he quotes it in the next page. Besides, he was accustomed to make his descriptions from memory, which requires assistance: and, lastly, the Magpie of the Antilles is perhaps the only one in which he mentions the number of the tail-quills,

fect

feet being red ; the neck blue, with a white collar ; the head of the same blue, tinged with a white spot, streaked with black, which extends from the origin of the upper mandible to the junction of the neck ; the back of a tawny colour, the rump yellow, the two long quills of the tail striped with blue and white, those of the wing mixed with green and blue, and the under side of the body white.

Upon comparing Father du Tertre's description of the Magpie of the Antilles, with that of Aldrovandus's long-tailed Magpie of India, we cannot doubt but they were formed from a bird of the same species, and consequently it is an American bird, as we are assured by Father du Tertre, who saw it at Guadaloupe, and not a native of Japan, as Aldrovandus asserts from a very uncertain tradition * ; unless we suppose that it had penetrated towards the north, and thus spread through both continents.

* " The emperor of Japan transmitted this most beautiful bird, some years since, to his holiness the Pope, as a remarkable present, as I have learned from the marquis Facchinetto, who said that it was received by his uncle Innocent IX." ALDROVANDUS.

IV.

The HOCISANA*.

Corvus Mexicanus, Gmel.

Pica Mexicana Major, Briss.

Le Griard, Pernetty's Voy.

The Mexican Crow, Lath.

Though Fernandez calls this bird a great stare, we may, from his own account, refer it to the genus of Magpies; for he tells us, that it would be exactly like the common jackdaw, if it were somewhat smaller; its tail and nails shorter, and its plumage of a purer black, and not mixed with blue. But a long tail is the property, not of the stare, but of the Magpie, and what discriminates it the most in its external appearance from the jackdaw. With regard to the other characters which separate the Hocifana from the jackdaw, they are as much foreign to the stare as to the Magpie, if not more so.

This bird courts the residence of man; it is as familiar as the Magpie, chatters like it, and has a shrill cry; its flesh is black, and very well tasted †.

* FERNANDEZ, cap. xxxiii. The Mexican name is *Hociz-anatl*; it is also called *Caxcaxtototl*.

† Specific character: "Entirely of a bluish black."

V.

The VARDIOLE*.

Seba has given this bird the appellation of the *Bird of Paradise*, as he has to almost all foreign birds with long tails. In this respect the Vardiole was entitled to the name, since its tail is double the extreme length of its body. But this tail is not formed as in the bird of paradise, for its quill feathers are furnished with vanes through their whole length, besides many other differences.

White is the prevailing colour in this bird: we must only except the head and neck, which are black, with very bright purple reflections; the feet, which are of a light red; the wings, whose quills have black vanes, and the two middle ones of the tail, which stretch much beyond the rest, and which are marked with black along their shaft, from the base to half of their length.

The eyes of the Vardiole are lively, and encircled with white; the base of the upper mandible is shaded with little hair-like black feathers, that meet behind and cover the nostrils; its wings are short, and extend not beyond the origin of its tail. So far it resembles the Magpie; but it differs on account of the shortness of its feet, which are only the half in proportion,

* It is called *Waygeboe*, or *Wardioe*.

a circumstance attended with other differences in its figure and port.

It is found in the island of Papoe, according to Seba, whose description is the only original one, and comprehends all that is known about this bird.

VI.

The Z A N O E*.

Corvus-Zanaboe, Gmel.

Pica Mexicana Minor, Briss.

The Lesser Mexican Crow, Lath.

Fernandez compares this Mexican bird to the common Magpie, for its size, for the length of its tail, for the perfection of its senses, for its talents for speaking, and for its proneness to steal whatever pleases its fancy. He adds, that its plumage is entirely black, except on the neck and head, where we can perceive a fulvous tinge†.

* The Mexican name is *Tzanaboei*.

† Specific character: “Blackish, its head and neck somewhat fulvous, its tail long.”

M

The J A Y *.

Le Gai, Buff.

Corvus Glandarius, Linn. and Gmel.

Garrulus, Briss.

Pica Glandaria, Gefner, Aldrov. and Ray.

WHAT we have said with regard to the instinct of the Magpie, we hold almost entirely in respect to the Jay; it will be sufficient, therefore, to notice the characteristic differences.

The principal one is the blue spot, or rather mail formed by various shades of blue, with which each of its wings is decorated, and which suffices to distinguish it, at least, from all the other European birds. It has also on its forehead a tuft of small feathers, black, blue, and white: in general its feathers have all a soft and silky feel, and it can at pleasure raise and depress those on its head. It is a fourth part less than the Magpie; its tail is shorter, and its

* In Greek, according to Belon, *Μαλακογάρυς*: in modern Greek, *Καρακαζα*: in Latin, *Garrulus*: in Spanish, *Gayo*, *Cayo*: in Italian, *Ghiandaia*, *Gaza Verla*, *Berta*, *Bertina*, *Baretino*: in German, *Häber*, *Hätzler*, *Baum Hatzel* (Tree-Jay), *Eichen-beber* (Oak-Jay), *Nuss-beber* (Nut-Jay), *Nuss-becker* (Nut-Hedger), *Jäck*, *Broe-kexter*, *Marggraff*, *Marcolfus*: in Swiss, *Herren-vogel*: in Polish, *Soyka*: in Swedish, *Nei-Skrika*, *Allon-Skrika*, *Korn-Skrika*.



THE JAY.

wings longer in proportion, but notwithstanding it can scarcely fly better *.

The male is distinguished by the bulk of his head and the lustre of his colours †. The old ones differ also from the young in their plumage, and hence the various inconsistent descriptions ‡.

The Jays are of a petulant disposition; they have keen sensations and brisk movements, and in their frequent bursts of rage they hurry into danger, and often entangle their head between two branches, and die thus suspended in the air §. When they feel restraint, their violence exceeds bounds; and hence, in a cage, they entirely lose their beauty, by the continual rumpling, wearing, and breaking of their feathers.

Their ordinary cry is harsh and frequent; they are also fond of imitating other birds whose notes are not more agreeable, such as the kestrel, the tawny owl, &c. || If they perceive in the wood a fox or other ravenous animal, they give

* Belon. † Olina.

‡ Willoughby says, that in the Jay described by Aldrovandus, no transverse spots appear on the tail. Its feet are gray, according to Belon; they are brown, verging on flesh-colour, according to Brisson, and our own observations.

§ GESNER. This instinct makes those battles credible, which are said to be fought between armies of Jays and those of Magpies.

|| Frisch.

a cer-

a certain shrill scream, to alarm their companions; they quickly assemble, presuming that they shall be formidable by their numbers, or at least by their noise *. This instinct, which the Jays have, of summoning their force, together with their violent antipathy to the brown owl, suggest several ways of ensnaring them, and the sport is commonly very successful †; for they are more petulant than the magpies, and by no means so suspicious or crafty; nor is their natural cry so various, though they have great flexibility of throat, and have a turn for imitating all the cries and sounds of animals which they habitually hear, and even human discourse. The word *Richard* they can the most easily imitate. They have also, like the magpie, and all the family of the daws, crows, and ravens, the habit of burying their superfluous provisions ‡, and of stealing whatever they can obtain. But they cannot always recognize the spot where they have buried their treasure, or, like all misers, they are more actuated by the fear of encroaching on their stock, than by the desire of using it; so that in the succeeding spring, the acorns and nuts that were concealed, perhaps forgotten, germinate in the earth, and their tender leaves discover the useless heap, though too late, to the frugal sordid hoarders.

* Frisch.

† Belon.

‡ *Id.*

The Jays breed in woods remote from human dwellings, preferring the most branchy oaks, whose trunks are entwined with ivy*: but they are not so artful and cautious as the magpies in building their nests. I have received many of these in the month of May; they were hollow hemispheres, formed with small interwoven roots, open above, without any soft lining, and without any exterior defence. I always found them to contain four or five eggs; others say that the number is five or six. They were smaller than pigeons eggs, gray, with more or less of a greenish hue, and with small spots faintly marked.

The young undergo their moulting in July: they keep company with their parents till the succeeding spring†, when they separate, to form new pairs. By this time the blue plate on their wings, which appears very early, has attained its highest beauty.

In the domestic condition, to which they easily conform themselves, they become accustomed to all sorts of food, and live in this way eight or ten years‡. In the state of freedom, they feed not only on acorns and filberts, but on chesnuts, peas, beans, sorbs, gooseberries, cherries, raspberries, &c. They also prey on the young of other birds, when they can surprise them in the nest during the absence of the pa-

* Olina.

† British Zoology.

‡ Olina, Frisch.

rents; and sometimes they venture to attack the old ones, when they discover them entangled in snares; and in this case they advance with their usual imprudence, and are often caught themselves *. Their flesh, though not delicate, is eatable, particularly if it be boiled first, and afterwards roasted.

In Jays, the first phalanx of the outer toe is in each foot connected with that of the middle toe; the inside of the mouth is black; the tongue of the same colour, forked, thin, membranous, and almost transparent; the gall-bladder is oblong; the stomach not so thick, and lined with weaker muscles than the gizzard in the granivorous tribe. Their gullet must be very wide, for they swallow acorns, filberts, and even chefnuts entire, like the ring-doves †; I know, however, that they never thus treat the flower-cup of a pink, though they are exceedingly fond of the seed which it contains. I have often admired their procedure: if a pink be thrown to them, they seize it greedily, and if others be offered, they continue to snatch them till their bill can hold no more. When they want to eat these, they lay aside all the rest but one, hold it with the right foot, and pluck off the petals one by one, keeping a watchful eye all the time, and casting a glance on every side: at last, when the seed appears, they de-

* Frisch. British Zoology.

† Belon.

vour it greedily, and again begin to pluck a second flower.

This bird is found in Sweden, Scotland, England, Germany, and Italy; and is, I believe, a native of every country in Europe, and even of the corresponding climates of Asia.

Pliny mentions a kind of Jays or magpies with five toes, which learned to speak better than the rest*. This is not more wonderful than that there should exist hens with five toes, especially as the Jays become more familiar and domestic than hens; and we know well, that all animals which live with man, and feed richly, are subject to exuberance of growth. The phalanges of the toes might be multiplied in some individuals beyond the usual number; a deviation which has been ascribed too generally to every species †.

But another variety, more generally known in this species, is the White Jay. It has the blue mark on the wings ‡, but is distinguished from the common Jay by the almost universal whiteness of its plumage, which extends even to its bill and nails, and by the red colour of its eyes, a property observed in so many other white animals. But we must not imagine that this white complexion is entirely pure; it is often shaded with a yellowish tinge of various intensity. In a subject which I examined, the

* Lib. x. 42.

† Aldrovandus.

‡ Gerini.

coverts of the wings were the whitest; its feet also seemed to be more slender than those of the common Jay. [A]

[A] Specific character of the Jay, *Corvus Glandarius*, LINN. : “ The coverts of its wings are sky-blue, with transverse white “ and black lines, its body variegated ferruginous.” It weighs between six and seven ounces, its length is thirteen inches, breadth twenty and a half. It is esteemed one of the most beautiful of the British birds.

M

FOREIGN BIRDS, WHICH ARE RELATED TO THE JAY.

I.

The RED-BILLED JAY of CHINA.

Corvus Erythrorhynchos, Gmel.

The Red-billed Jay, Lath.

THIS new kind of Jay has been just introduced into France. Its red bill is the more remarkable, as the whole of the fore-part of the head, the neck, and even the breast, is of a fine velvet black. The hind part of its head and neck is of a soft gray, which mixes in small spots on the crown, with the black of the fore-part; the upper side of the body is brown, the under whitish. But to form a clear idea of the colours, we must suppose a violet tint spread over them all, except the black, deeper on the wings, fainter on the back, and still more dilute under the belly. The tail is tapered, and the wings exceed not one-third of its length, and each of its quills is marked with three colours, viz. a light violet at its origin, black at its middle, and white at its extremity;

H 3

but

but the violet is more extensive than the black, and that still more than the white.

The feet are red, like the bill; the nails whitish at their origin, and brown near the point, and are, besides, very long and hooked.

This Jay is somewhat larger than ours, and may be only a variety arising from the influence of climate*.

* Specific character: "The body dusky above, and whitish below; the tail wedge-shaped; the tail-quills dilute violet at the base, black in the middle, and white at the tips."

II.

The PERUVIAN JAY.

Le Geai du Perou, Buff.

Corvus Peruvianus, Gmel.

The plumage of this bird is of singular beauty; it consists of an assemblage of the finest colours, sometimes melting with inimitable art, and sometimes forming a contrast which heightens the effect. The delicate green which prevails in the upper part of its body, extends on the one side over the six mid-quills of the tail, and on the other it advances, passing by insensible shades, and receiving, at the same time, a bluish tint, to join a sort of white crown on the head. The base of the bill is surrounded with a fine blue, which appears again behind the eye, and in

in the space below it. A kind of black velvet, which covers the throat and all the fore-part of the neck, is contrasted at its upper margin with the fine blue colour, and at its lower to the jonquil yellow which is spread over the breast, the belly, and the three lateral quills on each side of the tail. The tail is tapered, and more so, than the Siberian Jay.

Nothing is known with regard to the qualities of this bird, which has never been seen in Europe.

III.

The BROWN CANADA JAY, or CINE-
REOUS CROW. *Lath.*

Corvus Canadensis, Linn. and Gmel.

Garrulus Canadensis Fuscus, Briss.

The Cinereous Crow, Penns and Lath.

If it were possible to suppose that the Jay could migrate into America, I should be inclined to suppose that this is a variety of our European species; for it has the appearance and the port, and also those soft silky feathers which are conceived to belong peculiarly to the Jay. It is distinguished only by its inferior size, by the colours of its plumage, and by the length and shape of its tail, which is tapered. Such slight differences might be ascribed to climate;

but our Jay is unable to traverse the intervening ocean. Till, therefore, we receive a fuller account of the habits of the Brown Jay of Canada, we shall consider it as one of the foreign species the most analogous to our Jay.

The upper side of the body is of a brown colour; the under side, and also the crown of the head, the throat, and the fore-part of the neck, are of a dirty white, which also appears at the extremity of the tail and wings. In the individual which I observed, the bill and the legs were of a deep brown, the under side of the body of a deeper brown, and the lower mandible broader than in the figure: lastly, the feathers on the throat, jutting forward, formed a sort of barbil*.

* Specific character: "It is dusky, the front yellowish, the under-side of the body and the tips of the tail-quills white." It inhabits the northern and western parts of America, breeds early in the spring, and builds its nest with sticks and grass in the pines. It lays two, and rarely three eggs, which are blue. The young are quite black. They fly in pairs, the male and female being precisely alike. They store up berries in hollow trees; yet they are avaricious, and so bold as to visit the huts of the natives, and pilfer whatever they can snatch, even salted meat. They are seldom seen in the month of January, unless near dwellings.

IV.

The SIBERIAN JAY.

Corvus Sibiricus, Gmel.

The points of analogy between this new species and our Jay consist in a certain family likeness, and that the shape of the bill and feet, and the position of the nostrils, are nearly the same; and also that the Siberian Jay has, like ours, narrow feathers on its head, which it can raise at pleasure as a crest. The discriminating properties are these: it is smaller; its tail is tapered, and the colours of its plumage are very different. Its history is totally unknown.

V.

The WHITE COIF, or CAYENNE JAY.

Corvus Cayanus, Linn. and Gmel.*Garrulus Cayanensis*, Briss.

It is nearly of the size of the common Jay, only it is taller, its bill shorter, its tail and wings proportionally longer, which gives it a sprightlier air.

There are also other differences, chiefly in the plumage; gray, white, black, and the different

ferent shades of violet, constitute all the variety of its colours. The gray appears on the bill, the legs, and the nails; the black on the front, the sides of the head, and the throat; the white round the eyes, on the crown of the head, and on the nape as far as the origin of the neck, and also over all the lower part of the body; the violet lighter on the back and wings, and deeper on the tail, which is tipped with white, and composed of twelve quills, of which the two middle ones are rather longer than those towards the side.

The small black feathers on its front are short, and scarce flexible; part of them project over the nostrils, and the rest are reflected, so as to form a sort of ruffled crest *.

* Specific character: "It is somewhat violet, white below, its neck and front black, its tail white at the tip." It is thirteen inches long.

VI.

The GARLU, or the YELLOW-BELLIED JAY of CAYENNE.

Corvus Flavus, Gmel.

This also is a native of Cayenne; but of all the Jays it is the one which has the shortest wings; we should therefore be the farthest from suspect-

suspecting that it crossed the Atlantic, especially as it can subsist only in warm climates. Its feet are short and slender. I can add nothing with respect to its colours, but what the sight of the figure will suggest; and with respect to its habits, we are totally ignorant. We know not even whether, like the other Jays, it can erect the crown feathers. It is a new species *.

* Specific character: " Above, it is dusky-greenish; below, yellow; its chin and eye-lids white; its wings and tail of a dusky-bluish colour." It is nine inches long.

VII.

The BLUE JAY of NORTH-AMERICA.

Corvus Cristatus, Linn. and Gmel. }

Garrulus Canadensis Cæruleus, Briss. }

Pica Glandaria Cristata, Klein. }

The Blue Jay, Catesby, Edw. Penn. and Lath. }

This bird is noted for the fine blue colour of its plumage, which, with a slight intermixture of white, black, and purple, is spread over all the upper part of its body, from the crown of the head to the extremity of the tail.

Its throat is white, with a tint of red; under it is a kind of black gorget, and still lower a reddish zone, which melts by degrees into the gray and white that predominate in the lower part of the body. The feathers on the crown
of

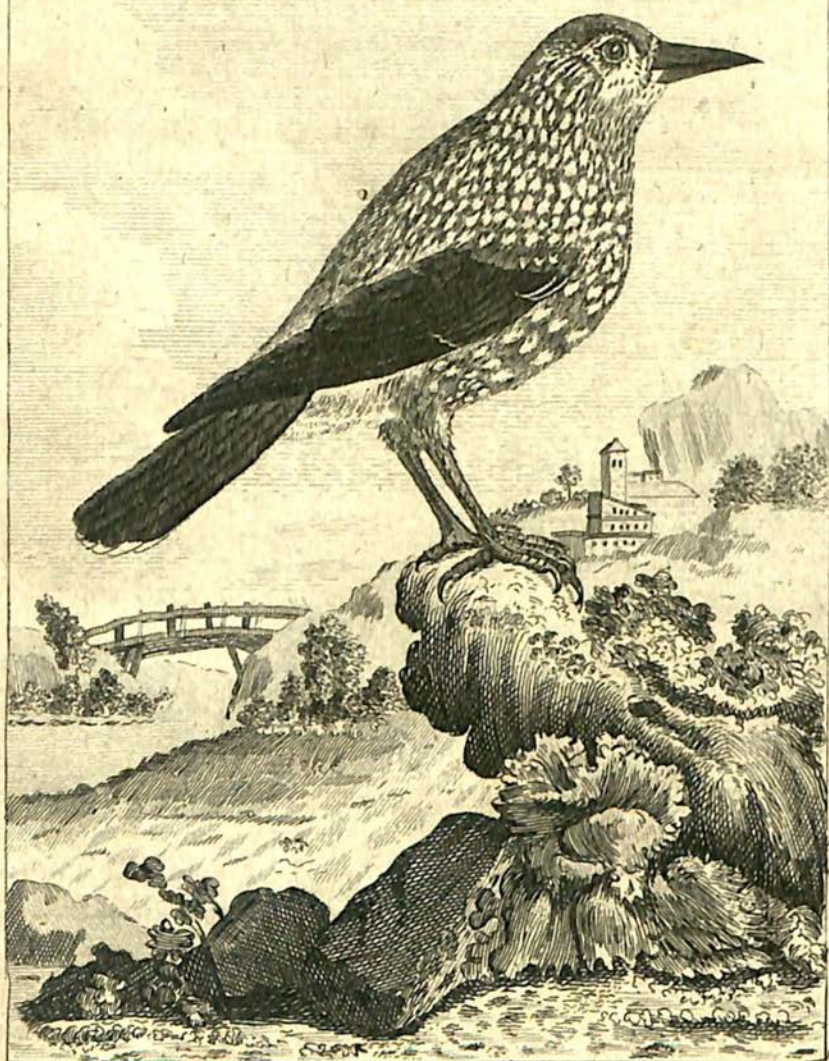
of the head are long, and the bird raises them at pleasure like a crest, which is larger and more beautiful than in our Jay: this is terminated on the front by a kind of black fillet, which, stretching on both sides over a white ground as far as the nape, joins the branches of the gorget. This fillet is divided from the bottom of the upper mandible by a white line formed by the small feathers which cover the nostrils.

The tail is almost as long as the bird itself, and consists of twelve staged quills.

Catesby remarks, that the American Jay has the same petulance in its actions as the common Jay; that its notes are less disagreeable, and that the female is distinguished from the male by its duller colours. Admitting this, Catesby's figure must represent a female, and that of Edwards a male; but the age of the bird must also affect the vivacity and perfection of its colours.

This Jay is brought from Carolina and Canada; and in those countries it must be very common, for many are sent to Europe*.

* Specific character: "The coverts of the wings are marked by black transverse lines, its body is corulean, its collar black." It is twelve inches long. It feeds on fruits and berries, of which it generally wastes more than it consumes. It lays, in the month of May, five or six eggs of dusky olive, with ferruginous spots. It remains in the country the whole year. It is well known to sailors by the name of *Blue Bird*, and frequently brought to Britain from Virginia and the Carolinas.



THE NUT CRACKER.

The NUTCRACKER*.

Le Caisse-Noix, Buff.

Corvus Caryocatactes, Linn. and Gmel.

Nucifraga, Briss.

Caryocatactes, Gefner, Ray, and Will.

Merula Saxatilis, Aldrov.

THIS bird is distinguished from the jays and magpies by the shape of its bill, which is straighter, blunter, and composed of two unequal pieces. Its instinct is also different, for it prefers the residence of high mountains, and its disposition is not so much tinged with cunning and suspicion. However, it is closely related to these two species of birds; and most authors not fettered by their systems, have ranged it with the jays and magpies, and even with the jackdaws †, which, it is well known, bear a great analogy to the magpies; but it is

* This bird was unknown to the Greeks, tho' Gefner has formed a compound Greek name *Καρυοκατάκτες*, from *καρυα*, a nut, and *κατακτείνω*, to kill: in Latin it is called *Nucifraga*, *Offisfragus*; and by some *Turda Saxatilis*, *Pica Abietum Guttiata* (Stone-Thrush, or speckled Pine-Magpie): in Turkish, *Garga*: in German, *Nußbretscher*, *Nußkraehe* (Nut-Crow); *Tannen beyer* (Fir-Jay), *Steinbeyer*, *Wald-sarl* (Wood-Stare), *Türkischer-holst-schreyer* (the Turkish Forest-brawler): in Polish, *Kleśk*, *Grabulysk*: in Russian, *Kostohryz*: in French, *Pie Grivelée*.

† Gefner, Turner, Klein, Willughby, Linnæus, Frisch.

asserted

asserted that it chatters more than any of these.

Klein distinguishes two varieties of the Nutcracker; the one, speckled like the stare, has a strong angular bill, a long forked tongue, as in all the magpies; the other is of inferior size, and its bill (for he says nothing of the plumage) is more slender and rounder, composed of two unequal mandibles, the upper of which is the longer, and its tongue divided deeply, very short, and almost lost in the throat*.

According to the same author, these two birds eat hazel-nuts; but the former breaks them, and the latter pierces them: they feed also on acorns, wild berries, the kernels of pine-tops, which they pluck dextrously, and even insects. And lastly, like the jays, the magpies, and the jackdaws, they conceal what they cannot consume.

Besides the brilliancy of the plumage, the Nutcracker is remarkable for the triangular white spots which are spread over its whole body, except the head. These spots are smaller on the

* According to Willughby, the tongue seems not capable of reaching farther than the corners of the mouth, while the bill is closed; because in that situation the cavity of the palate, which usually corresponds to the tongue, is then filled by a protuberant ridge of the lower jaw, which here fits this cavity. He adds, that the bottom of the palate, and the sides of the chaps, are roughened with little points,

upper part, and broader on the breast; their effect is the greater, as they are contrasted with the brown ground.

These birds are most attached, as I have observed above, to mountainous situations. They are common in Auvergne, Savoy, Lorraine, Franche-Comté, Switzerland, the Bergamasque, in Austria in the mountains which are covered with forests of pines. They also occur in Sweden, though only in the southern parts of that country *. The people in Germany call them Turkey birds, Italian birds, African birds; which language means no more than that they are foreign †.

Though the Nutcrackers are not birds of passage, they fly sometimes from the mountains to the plains. Frisch says, that flocks of them are often observed to accompany other birds into different parts of Germany, especially where there are pine forests. But in 1754, great flights of them entered France, particularly Burgundy, where there are few pines; they were so fatigued on their arrival, that they suffered themselves to be caught by the hand ‡. One was

* "It inhabits Smoland, and rarely occurs elsewhere." *Fauna Suecica*.—Gerini remarks that it is never seen in Tuscany.

† Frisch.

‡ A skilful ornithologist of the town of Sarbourg, (Dr. Lottinger, who is well acquainted with the birds of Lorraine, and to whom I am indebted for many facts relating to their instincts, their habits,

was killed in the month of October that same year at Mostyn in Flintshire, which was supposed to have come from Germany. We may remark, that that year was exceedingly arid and hot, which must have dried up most of the springs, and have much affected those fruits on which the Nutcrackers usually feed. Besides, as on their arrival they seemed to be famished, and were caught by all sorts of baits, it is probable that they were constrained to abandon their retreats for want of subsistence.

One of the reasons, it is said, why the Nutcrackers do not settle and breed in the inviting climates, is the perpetual war waged against them by the proprietors of the woods, for the injuries which they commit on the large trees, by piercing the trunks, like the wood-peckers *. Part of them is soon destroyed, and the rest is forced to seek an asylum in the desert unprotected forests.

habits, and their migrations), informs me, that in the same year (1754) flights so numerous of Nutcrackers passed into Lorraine, that the woods and the fields were filled with them. Their stay lasted the whole month of October, and hunger had so much enfeebled them, that they were knocked down with sticks. The same observer adds, that these birds appeared again in 1763, but in smaller numbers; that their passage is always in autumn, and that six or nine years commonly intervene between their visits. This must be restricted to Lorraine; for in France, especially in Burgundy, the Nutcrackers appear much seldomer.

* Salerne.

Nor is this the only circumstance in which they resemble the Woodpeckers; they nestle, like them, in the holes of trees, which, perhaps, they themselves have formed; for the middle quills of the tail are also worn near the end *, which shews that they, as well as the woodpeckers, clamber upon trees. In short, Nature seems to have placed the Nutcrackers between the Woodpeckers and the Jays; and it is singular, that Willughby has given them this precise arrangement in his Ornithology, though his description suggests no relation between these species.

The iris is of a hazel-colour; the bill, the feet, and the nails black; the nostrils round, shaded with whitish feathers, straight, stiff, and projecting; the feathers of the wing and tail are blackish, without spots, but only terminated for the most part with white; though there are some varieties in the different individuals, and in the different descriptions, which seems to confirm the opinion of Klein with regard to the two races or varieties, which he admits into the species of the Nutcrackers.

We cannot find, in writers of natural history, any details with regard to their laying, their incubation, the training of their young, the duration of their life, &c. for they haunt

* Linnæus.

inaccessible spots, where they enjoy undisturbed safety and felicity. [A]

[A] Specific character of the Nutcracker, *Corvus-Caryocatactes*, LINN. :—" It is dusky, dotted with white, its wings and tail black; the tail-quills white at the tip, the middle ones worn at the tip." It is thirteen inches long. It inhabits Europe and the north of Asia, but very seldom appears in Great Britain.

M.

The ROLLERS.

Les Rolliers, Buff.

IF we regard the European Roller as the type of the genus, and rest its distinctive character, not upon one or two superficial qualities, but upon the general combination of its properties, we shall be obliged to make considerable changes in the enumeration given by Brisson.

On this principle, which appears to be well founded, I reduce, 1. The European Roller and the Shaga-Rag of Barbary, mentioned by Dr. Shaw, to the same species. 2. I range together the Abyssinian and the Senegal Roller, with which Brisson seems not to have been acquainted. 3. I class together the Roller of Mindanao; that of Angola, which Brisson makes his twelfth and thirteenth Rollers; and that of Goa, which Brisson does not mention. 4. I exclude from the genus of Rollers the fifth species of Brisson, or the Chinese Roller, because it is a different bird, and is much more like the Cayenne *Grivet*, with which I shall class it: I shall place both of them, under the common name of *Rolle*, before the Rollers, because

cause they appear to form the intermediate shade between the Jays and the Rollers. 5. I transfer the Roller of the Antilles to the Jays, which is the sixth species of Brisson. 6. I leave among the birds of prey the *Ytzquaubtli*, of which Brisson has made his seventh species of Roller, by the name of *the Roller of New Spain*, the history of which has been given after the Eagles. In fact, according to Fernandez, who is the original author, and even according to Seba, who copies him, it is really a bird of prey, devouring hares and rabbits, and consequently is very different from the Rollers. Fernandez subjoins, that it is proper for falconry, and that its bulk is equal to that of a ram. 7. I omit also the *Hoxctot*, or Yellow Roller of Brisson, which I have ranged after the magpies, as being more related to that kind than to any other. Lastly, I exclude the *Ococolin* of Fernandez, for the reasons already stated in the article of the quails; nor can I admit the *Ococolin* of Seba, which is very different from that of Fernandez, though it bears the same name; for it is of the size of a crow, its bill is thick and short, its toes and nails very long, its eyes encircled with red *papillæ*, &c. In short, after this reduction, and the addition of the new species or varieties which have been hitherto unknown, the genus will consist of two species of *Rollers*, and seven of Rollers with their varieties.

The

The CHINESE ROLLER.

Coracias Sinenfis, Gmel.*Galgulus Sinenfis*, Briss.*The Chinese Roller*, Lath.

This bird has wide nostrils like the Rollers, and a bill resembling theirs; but are these characters sufficient to justify its classification with the Rollers? or are these not counter-balanced by more numerous and more important differences? Its feet are longer, its wings shorter, and consist of a smaller number of quills, and these differently proportioned*; its tail is tapered, and its crest is precisely like that of the blue Canada Jay. These circumstances, but particularly the length of its wings, have induced me to assign it a place between the Jays and the Rollers†.

* In the *Chinese Rolle*, the wing consists of eighteen quills, of which the first is very short, and the fifth longer than the rest, as in the Jay; whereas the wing of the Roller includes twenty-three quills, of which the second is the longest.

† Specific character: — “It is green: below, yellowish-white; the tail wedge-shaped; the tip white.” It is eleven inches and a half long.

The GRIVERT, or CAYENNE ROLLE.

Coracias Cayanensis, Gmel.

The Cayenne Roller, Lath.

This bird ought not to be separated from the preceding, which it is entirely like, except because it is smaller, and the colours of its plumage different. With regard to the instincts and habits of these birds, we can draw no comparison, though the resemblance in their exterior properties seems to denote a radical connection*.

* Specific character :—“ It is of a dusky green ; below, dirty white ; the eye-brows white ; the upper part of the throat striated both ways with black ; the tail wedge-shaped.” It is nine inches long.

The GARRULOUS ROLLER†.

Le Rollier d'Europe, Buff.

Coracias-Garrula, Linn. and Gmel.

Galgulus, Briss.

Coracias-Cærulea, Gerini.

Garrulus-Cæruleus, Frisch.

The names of *Strasburg Jay*, *Sea-Magpie*, *Birch-Magpie*, and *German Parrot*, which this bird

† Gesner was told that the German name *Roller* was expressive of its cry ; Schwenckfeld says the same of *Rache*. One of them must



THE GARRULOUS ROLLER.

bird has received in different countries, have been applied at random from popular and superficial analogies. We need only view the bird, or even a good coloured figure of it, to be convinced that it is not a parrot, though there is a mixture of green and blue in its plumage; and a closer examination will inform us that it is neither a magpie nor a jay, though it chatters incessantly like these birds*. Its appearance and port are different; its bill is not so thick; its legs much shorter in proportion, shorter even than the mid-toe; its wings longer, and its tail entirely of a different shape, the two outer quills projecting more than half an inch (at least in some individuals) beyond the six intermediate ones, which are all equal in length. It has also a kind of wart behind the eye, and the eye itself is surrounded with a ring of yellow naked skin†.

The appellation of Strasburg Jay is still more absurd; for M. Hermann, professor of medicine and natural history in that city, writes me,

must be mistaken, and I am inclined to think that it is Gesner; for the name *Rache*, adopted by Schwenckfeld, is more analogous with those given to this bird in different countries, and which are probably derived from its cry. In German, *Galgen-Regel*, *Halk-Regel*, *Gals-Kregel*, *Racher*; in Polish, *Krafka*; in Swedish, *Spanst-Krafka*. It has also the following names in Germany: *Heiden-Elster*, *Kugel-Elster*, *Mandel-Krae*, *Deutscher-Papagey*, *Birk-Heber*, (i. e. Heath-Magpie, Ball-Magpie, Almond-Crow, German Popinjay, Birch-Jay.)

* Aldrovandus.

† Edwards.

“ The Rollers are so rare here, that scarcely three or four stragglers are seen in the course of twenty years.” One of these had been sent to Gesner, who, not being acquainted with the fact, denominated it the *Strasburg Jay*.

Besides, it is a bird of passage, and performs its migrations regularly once a-year, in the months of May and September *; yet it is not so common as the magpie or the jay. It is found in Sweden † and in Africa ‡; but we must not suppose it settled in the intermediate regions. It is unknown in many parts of Germany §, France, and Switzerland ||, &c. We may therefore conclude that, in its passage, it moves only in a narrow zone, from Smoland and Scania to Africa. There are even points now given to mark nearly its tract through Saxony, Franconia, Suabia, Bavaria, Tirol, Italy ¶, Sicily **, and lastly, the island of Malta ††, which is a sort of general rendezvous for all

* Extract of a Letter from the Commander Godeheu of Riville, on the Migration of Birds, tom. iii. *Memoires présentés à l'Académie Royale des Sciences*, p. 82.

† *Fauna Suecica*, No. 73.

‡ Shaw's Travels. § Frisch.

|| “ It was caught with us in the middle of August 1561, and not known.” GESNER *de Avibus*.

¶ “ I remember to have seen it once at Bologna.” *Id.*

** “ We saw them for sale on the stalls at Messina in Sicily.”

WILLUGHBY.

†† “ We saw them exposed for sale in the market of Malta.” *Id.* Also Commander Godeheu's letter.

the

the birds that cross the Mediterranean. The one described by Edwards was killed on the rock of Gibraltar, whence it could wing its lofty * course to the African shore. It is also seen sometimes in the vicinity of Strasburg, as we have already noticed, and even in Lorraine, and in the heart of France †; but these are probably young ones, which stray from the main body.

The Roller is more wild than the jay or the magpie: it settles in the thickest and the most solitary woods; nor, as far as I know, has it ever been tamed or taught to speak ‡. Its plumage is beautiful; it has an assemblage of the finest shades of blue and green, mixed with white, and heightened by the contrast of dusky colours §. But a good figure is superior to any description. The young do not assume the delicate azure till the second year; whereas the jays are decorated with their most beautiful feathers before they leave the nest.

* Gesner.

† BRISSON. M Lottinger informs me, that in Lorraine these birds pass more seldom than the Nutcrackers, and in smaller numbers. He adds, that they are never seen but in autumn, no more than the Nutcrackers; and that in 1771 one was wounded in the neighbourhood of Sarrebourg, which, notwithstanding, lived thirteen or fourteen days without sustenance.

‡ Schwenckfeld.

§ Linnæus is the only one who says that its back is blood-coloured. *Fauna Suecica*, No. 73.—Was the subject that he described different from all those described by other naturalists?

The

The Rollers build, when it is in their power, on birches, and it is only when they cannot find these that they lodge in other trees *. But in countries where wood is scarce, as in the island of Malta and in Africa, they form their nest, it is said, on the ground †. If this be a fact, it would follow, that the instincts of animals can be modified by situation, climate, &c.

Klein says, that contrary to what happens in other birds, the young Rollers void their excrements in the nest ‡; and this circumstance has perhaps given rise to the notion that this bird besmears its nest with human ordure, as has been alleged of the hoopoe §; but this is inconsistent with its lonely sylvan haunt.

These birds are often seen in company with the wood-peckers and crows, in the tilled

* Frisch.

† “ A sportsman,” says M. Godeheu, in a letter which I have already quoted, “ assured me, that in the month of June he saw
“ one of these birds issuing from a bank of earth, where was a
“ hole as large as the hand; and that having dug the spot in the
“ direction of the hole, which went horizontally, he found, at the
“ depth of a foot or thereabouts, a nest made of straw and thorns,
“ in which were two eggs.” This account of the sportsman, which would be doubtful if it were single, seems confirmed by that of Dr. Shaw, who, speaking of the bird known in Africa under the name of *Shaga-Rag*, says, that it makes its nest on the brinks of rivers. Notwithstanding, I am much afraid that there is some mistake, and that the King-fisher was taken for the Roller, on account of the resemblance of its colours.

‡ *Ordo Avium*, p. 62.

§ Schwenckfeld.

grounds

grounds which are in the vicinity of their forests. They pick up the small seeds, roots, and worms which the plough throws to the surface, and even the grain that is lately sown. When this supply fails them, they have recourse to wild berries, caterpillars, grasshoppers, and even frogs*. Schwenckfeld adds, that they sometimes devour carrion; but this must be during winter, and only in cases of absolute want†; for they are in general regarded as not carnivorous, and Schwenckfeld himself remarks that they are very fat in autumn, and then are good eating‡, which can hardly be said of birds that feed on garbage.

The Roller has long narrow nostrils placed obliquely on the bill near its base, and open; the tongue is black, not forked, but ragged at the tip, and terminated towards the root by two forked appendices, one on each side; the palate is green, the gullet yellow, the ventricle of a saffron colour, the intestines about a foot long, and the *cæca* twenty-seven lines. The wings extend twenty-two inches, each consisting of twenty quills, or, according to others, of twenty-three, the second of which is the longest of all. Lastly, it is observed that

* Klein, Willughby, Schwenckfeld, Linnæus.

† If they rake among garbage in summer, it must be for insects.

‡ Frisch compares their flesh to that of the ring-dove.

wherever these quills are black on the outside, they are blue beneath.

Aldroyandus, who seems to have been well acquainted with these birds, and who lived in a country which they inhabit, asserts that the female differs much from the male, its bill being thicker, and its head, neck, breast, and belly of a chestnut colour, bordering on ash-gray, while the corresponding parts in the male are of the colour of the beryl, with different reflections of a duller green. I suspect that the two long outside quills of the tail, and the warts behind the eyes, which appear only in some individuals, are the attributes of the male, as the spur in the gallinaceous tribe, the long tail in the peacocks, &c. [A]

• Willughby, Schwenckfeld, Brisson.

[A] Specific character of the Garrulous-Roller, *Coracias-Garrula*, LINN. :—"It is sky-blue, its back red, its tail-quills black." Its eggs are of a pale green, with numerous dull spots, and of the bulk of a pigeon's. It is seldom or never seen in Great Britain.

M

VARIETIES of the ROLLER.

Dr. Shaw mentions, in his Travels, a bird of Barbary, called by the Arabs *Shaga-Rag*, which is of the bulk and shape of the jay, but with a smaller bill and shorter feet.

The

The upper part of the body of this bird is brown; the head, neck, and belly of a light green, and on the wings, as well as on the tail, are spots of a deep blue. Dr. Shaw adds, that it makes its nest on the banks of rivers, and that its cry is shrill.

This short description agrees so well with our Roller, that we cannot doubt but the Shaga-Rag belongs to the same species; and the resemblance which the name bears to most of the German appellations of the Roller, derived from its voice, adds to the probability*.

* Mr. Latham conjectures that the *Shaga-Rag* is the same with the Variety of the Abyssinian Roller, afterwards described.

FOREIGN BIRDS, WHICH ARE RELATED TO THE ROLLER.

I.

The ABYSSINIAN ROLLER.

Coracias Abyssinica, Gmel.

THIS bird is, in its plumage, much like the European Roller; only its colours are more lively and brilliant, which must be ascribed to the influence of a drier and hotter climate. On the other hand, it resembles the Angola Roller, by the length of the two side feathers of its tail, which project five inches beyond the rest. In short, this bird seems to occupy a place between the European and Angola Rollers. The point of its upper mandible is very hooked. It is entirely a new species.

VARIETY of the ABYSSINIAN ROLLER.

We may consider the Senegal Roller as a variety of that of Abyssinia. The chief difference between them is, that in the Abyssinian bird

bird the orange colour of the back does not extend, as in that of Senegal, so far as the neck and the hind part of the head: a difference which would not be sufficient to constitute two distinct species, especially as they belong to nearly the same climate, as the two lateral quills are double the length of the intermediate ones, as in both the wings are shorter than those of the European Roller; and lastly, as they are alike in the shades, the lustre, and the distribution of their colours*.

* This is the *Coracias Senegalensis* of Gmelin, the *Swallow-tailed Indian Roller* of Edwards, and the *Senegal Roller* of Latham.

II.

The ANGOLA ROLLER, or the MIN-DANAO ROLLER.

These two Rollers resemble each other so exactly, that it is impossible to separate them. That of Angola is distinguished from the other only by the length of the exterior quills of its tail, which is double that of the intermediate ones, and by slight variations of colour. But differences so minute may be the effect of age, of sex, or even of moulting; and the inspection of our figures, nay, the descriptions of

Briffon, who makes two species of them, will confirm our conjecture of the identity of the two species. They are both nearly of the bulk of the European Roller, have the same general shape, its bill somewhat hooked, its naked nostrils, its short legs, its long toes, its long wings, and even the colours of its plumage, though differently distributed: they are always blue, green, and brown, which are sometimes distinct, sometimes mixed, melted together, forming many intermediate shades, and having various reflections. The bluish green, or sea green, is however spread on the crown of the head; the brown, more or less intense, and more or less greenish, covers all the fore-part of the body, with some tints of violet on the throat; and the blue, the green, and all the shades which arise from their mixture, appear on the rump, the tail, the wings, and the belly: only the Mindanao Roller has under its breast a kind of orange tincture, which is not found in that of Angola.

To this opinion it will be objected, perhaps, that the kingdom of Angola is at a great distance from Bengal, and still farther from the Philippines. But is it impossible, or is it not natural, that these birds should be spread through the different parts of the same continent, or the neighbouring islands, which are connected with it, perhaps by the continuation of the same chain,

chain, especially in climates so nearly alike? Besides, we cannot always expect the most scrupulous exactness in those who import the productions of foreign countries; and the intercourse of European vessels with the various regions of the globe is so extensive and multiplied, that a bird found in the East Indies, might have been carried to Guinea, and afterwards imported as a native of Africa. Admitting this, if we ascribe the slight differences between the Roller of Mindanao and that of Angola to the effect of age, we must reckon the latter the older; or if we impute them to the distinction of sex, we must consider it as the male: for we know that in the Rollers, the fine colours of the feathers do not appear till the second year; and it is a general principle, that in all birds, the male, when it differs from the female, is distinguished by an exuberance of growth, or a superior richness of plumage*.

* Specific character of the Angola Roller, which is the *Coccyzus Caudata* of Linnæus, and the *Long-tailed Roller* of Latham:—"It is somewhat fulvous; below, cœrulean; the neck striated below with pale violet; the outmost quills of the tail very long."

Specific character of the Mindanao Roller, which is the *Coccyzus Bengâlenfis* of Gmelin; the *Bengal Pie*, or *Jay*, of Albin; and the *Bengal Roller* of Latham:—"It is somewhat fulvous; below, cœrulean; the neck striated beneath with pale violet; the tail entire."

VARIETY of the ANGOLA and MINDANAO ROLLERS.

The Royal Cabinet has lately received from Goa a new Roller, which is very like that of Mindanao. It differs only by its size, and by a sort of collar, like wine-lees in colour, which grasps only the hind part of the neck, a little under the head. It has not, any more than the Angola Roller, the orange cincture of the Mindanao Roller; but if in this respect it differs from the latter, it is so much the more allied to the former, which is certainly of the same species.

III.

The ROLLER of the INDIES.

Coracias Orientalis, Gmel.

Galgulus Indicus, Briss.

The Oriental Roller, Lath.

This Roller, which is the fourth of Brisson, differs less from the preceding in the nature of its colours, which are always blue, green, brown, &c. than in the order of their distribution; but in general its plumage is more dusky, its bill is also broader at the base, more hooked, and



THE MADAGASCAR ROLLER,

and of a yellow colour: lastly, of all the Rollers it has the longest wings.

M. Sonerat has lately sent to the Royal Cabinet a bird, which is almost in every respect like the Indian Roller; only its bill is still broader, and for this reason it has received the epithet of *large-toad-mouthed*: but that appellation would better suit the Goat-fucker*.

* Specific character:—"It is green, its throat striated with coerulean; its tail-quills black at the tip. It is of the bulk of the jay, being ten inches and a half long."

IV.

The MADAGASCAR ROLLER.

Coracias Madagascariensis, Gmel.

This species differs from all the preceding in several properties: its bill is thicker at the base, its eyes are larger, its wings and tail longer, though the exterior pupils of the latter do not project beyond the rest: lastly, the plumage is of an uniform purple-brown, excepting only that the bill is yellow, the largest quills of the wings black, the lower belly of a light blue, the tail of the same colour, edged at its extremity with a bar of three shades, viz. purple, light blue, and dark purple approaching to black. It has all the other characters which belong to

the Rollers; short feet, the edges of the upper mandible scalloped near the point, the small feathers which reflect from its base, and the naked nostrils, &c.

V.

The MEXICAN ROLLER.

Coracias Mexicanus, Gmel.

Galgulus Mexicanus, Briss.

This is the Mexican Black-bird of Seba, which Briffon makes his eighth Roller. It would require the inspection of it to fix its true species; for this would be difficult, from the short notice given by Seba, who is here the original author. I place it among the Rollers, because I know of no reason to exclude it; I therefore follow the opinion of Briffon, till more perfect information confirm or destroy the temporary arrangement. The colours are different from those which are common in the Rollers. The upper part of the body is of a dull gray, mixed with a rufous tint, and the under of a light gray, with some marks of fire-colour*.

* Specific character:—“It is of a gray-rufous; below, and on the wings, of a dilute gray, mixed with flame-colour.” It is much larger than a thrush.

VI. The

VI.

The PARADISE ROLLER.

Oriolus Aureus, Linn. and Gmel.

Paradisea Aurea, Lath.

Istericus Indicus, Lath.

The Golden Bird of Paradise, Edw.

I place this bird between the Rollers and the Birds of Paradise, as forming the shade which connects these two kinds, because it seems to have the shape of the former, and to resemble the latter by its smallness, and the situation of the eyes under and very near the junction of the mandibles, and by a sort of natural velvet which covers the throat and part of the head. Besides, the two long quills of the tail, which sometimes occur in the European Roller, and which are much longer in that of Angola, is another analogical character that connects the genus of the Roller with that of the Bird of Paradise.

The upper part of the body of this bird is of a vivid and brilliant orange, the under of a fine yellow; it has no black but under the throat, on part of the shoulders, and on the quills of the tail. The feathers which cover the hind part of the neck are long, narrow, flexible, and recline on each side over the lateral parts of the neck and breast.

The feet and legs had been torn from the subject described and designed by Edwards, as if it had been a real Bird of Paradise ; and this circumstance probably led that naturalist to refer it to that genus, though it has none of the principal characters. The quills of the wings were wanting, though those of the tail were complete ; they were, as I have said, twelve in number, and terminated with yellow. Edwards suspects that the quills of the wing are also black, whether because they are of the same colour with those of the tail, or that they were wanting in the individual which he observed ; for dealers in birds, in drying the specimens, pluck all the feathers which are of a bad colour, to increase the beauty of the plumage *.

* Specific character :—" It is of a fulvous-yellow ; its bridle, the upper part of its throat, the primary coverts, and the tips of the tail-quills, black." It is eight inches long.

M



THE GREATER PARADISE.

The GREATER BIRD of PARADISE*.

L' Oiseau de Paradis, Buff.

Paradisea Apoda, Linn. and Gmel.

Manucodiata, Briss.

Paradisea Avis, Clusius, Seba, Wormius, &c.

THIS species is more famous for the fictitious and imaginary qualities ascribed to it, than for any real and remarkable properties. The name of the *Bird of Paradise* commonly suggests the idea of a bird which has no feet; which flies constantly, even in its sleep, or at most suspends itself but for a few moments from the branches of trees, by means of the long filaments of its tail †; which copulates in its flight, like certain insects, and lays and hatches in a way unexampled in nature ‡; which lives only on vapours and dews, and which has the cavity

* In Latin, *Apis Indica*, *Avis Dei*, *Parvus Pavo*, *Pavo Indicus*, *Manucodiata*, which the Italians have adopted, *Manucodiata Rex*, *Manucodiata Longa*, *Hippomanucodiata*, *Hirundo Ternatensis*: in German, *Lust-Vogel* (Sky-Bird), *Paradis-Vogel*: in Portuguese, *Paffaros de Sol* (Sparrow of the Sun).

† *Acoftai*

‡ To give an air of probability to the relation, the male, it is alleged, has on its back a cavity, where the female deposits her eggs, and hatches them by means of a corresponding cavity

vity of its abdomen entirely filled with fat, instead of stomach and intestines *, (which would be quite superfluous, since it eats nothing, and therefore needs not to digest or to void :) in short, which has no existence but motion, no element but air, where it is supported as long as it retains breath, as fish are buoyed up in water, and which never touches the ground till after death †.

This monstrous heap of absurdities is only a chain of consequences justly drawn from a radical error, that the Bird of Paradise has no legs, though it is furnished with even pretty large ones ‡.

The fact § is, that the Indian merchants, who trade with the feathers of this bird, or the
fowlers

in her abdomen; and that the sifter might maintain her posture, they entwine themselves with their long filaments. Others have said, that they nestle in the terrestrial paradise, and hence their name. See *Musæum Wormianum*, p. 294.

* Aldrovandus.

† The people of India say, that they are always found with their bills pitched into the ground. *Navigations aux Terres Australes*, tom. ii. p. 232. In fact, their bill must necessarily fall foremost.

‡ Barrere, who seems on this head to speak only from conjecture, asserts, that the Birds of Paradise have legs so short, and so thickly clothed with feathers to the toes, that one should suppose them to have none at all. It is thus that, trying to explain one mistake, he falls into another.

§ The inhabitants of the Arou islands believe that these birds are hatched with legs, but apt to lose them, either from disease or old age: If this were true, it would at once explain and excuse the error. See the observations of J. Otto Helbigius, *Collect.*

Acad.

fowlers who sell them, are accustomed, whether for the sake of preserving and transporting the specimens with more ease, or perhaps of countenancing an error which is favourable to their interest, to dry the bird with its feathers, after having previously separated the thighs and extracted the entrails. This practice has been so long continued, as to have strengthened the prejudice to such a degree, that those who first asserted the truth were, as usual, regarded as unworthy of credit*.

The fable, that the Bird of Paradise continually flies, derived an appearance of probability from the consideration of the quantity of feathers with which it is furnished; for besides those common to other birds, it has many long feathers, which rise on each side between the wing and the thigh, and which, extending much beyond the true tail, and mingling with it, form a sort of false tail, which many observers have mistaken. These *subalar* feathers are what the naturalists term *decomposed*; they are very light themselves, and form a bunch

Acad. partie Etrang. tom. iii. p. 448.) If what Olaus Wormius (*Musæum*, p. 295.) asserts were a fact, that each of the toes of this bird has three articulations, this singularity would be still greater; for in almost all birds, the number of joints is different in each toe, the hind one having two, including that of the nail, and of the fore-toes, the inner having three, the middle one four, and the outer five.

* “Antonius Pigafetta falsely ascribes to their legs a palm of length.” *Alarovanus*, tom. i. p. 807.

almost

almost devoid of weight, and aërial; they will therefore increase the apparent bulk of the bird *, diminish its specific gravity, and thus assist in supporting it in the air. But if the wind be contrary, the abundance of plumage will rather obstruct its motion; accordingly it is observed, that the bird of Paradise avoids the blustering gales †, and commonly settles in countries the least subject to them.

These feathers are of the number of forty or fifty on each side, of unequal lengths; the greater part spread under the true tail, and others lie over it, without concealing it; for their texture is delicately slender, and almost transparent, which is very difficult to represent in a figure.

These feathers are highly esteemed in India, and much sought after. It is not more than a century since they were employed in Europe for the same purposes as those of the Ostrich; and, indeed, their lightness and brilliancy make them elegant ornaments. But the priests of Asia ascribe to them miraculous virtues, which give them a new value in the eyes of the vulgar, and have procured the bird the appellation of the *Bird of God*.

* It is said to appear as large as a pigeon, though it exceeds not the bulk of a blackbird.

† The Arous consist of five islands, and these birds inhabit only the middle ones; they never appear in the others, because, being naturally weak, they cannot withstand high winds.

HELBIGIUS.

Next to this, the most remarkable property of the Bird of Paradise is those two long filaments which take their rise above the true tail, and extend more than a foot beyond the false tail, formed by the subalar feathers. These, indeed, are real filaments only at their middle; for at their origin and their termination, they are furnished with webs of the ordinary breadth. In the females the extremities are narrower, which, according to Brisson, is the only distinction between it and the male *.

The head and throat are covered with a sort of velvet, formed by small erect feathers, which are short, stiff, and close; those of the breast and back are longer, but always silky and soft to the feel. They are all of different colours, which vary according to the position and the light in which they are viewed.

The head is very small in proportion to the body; the eyes still smaller, and placed very near the opening of the bill. Clusius reckons only ten quills in the tail; but this assertion was certainly not founded on the examination of a living subject, and it is doubtful whether the plumage of a bird brought from so great a distance be entire, especially as it is subject to an annual moulting, which lasts several months. During that time, which happens

* The inhabitants of the country say, that the females are smaller than the males, according to J. Otto Helbigius.

in the rainy season, it lives concealed ; but, in the beginning of August, after hatching, its feathers are restored, and in the months of September and October, in which calm weather prevails, it flies in flocks, like the Stares in Europe*.

This beautiful bird is not much diffused : it is almost entirely confined to that part of Asia which produces the spiceries, and especially the islands of Arou. It is known also in the part of New Guinea opposite to these islands ; but the name which it there receives, *Burung-Arou*, seems to indicate its natal soil.

Since warm regions of spices alone are proper for the Bird of Paradise, it probably subsists on some aromatic productions† ; at least it does not live solely on dew. J. Otto Helbigius, who travelled into India, tells us, that it feeds on red berries, which grow on a very tall tree. Linnæus says, that it subsists on large butterflies‡ ; and Bontius, that it sometimes preys on small birds. Its ordinary haunt is the woods, where it perches on the trees, and the Indians watch it in slender huts, which they

* Helbigius.

† Tavernier remarks, that the Paradise Bird is very fond of nutmegs, and that it resorts to eat them in the season ; that it passes in flocks, like those which we observe of the thrushes in the time of vintage, and that they are intoxicated by the nutmegs, and drop down. *Voyage des Indes*, tom. iii. p. 369.

‡ *Systema Naturæ*, Edit. x. p. 110.

attach to the branches, and shoot it with their arrows of reeds*. It flies like the swallow, whence it has been called the *Ternate-swallow*†; though others say, that its shape, indeed, resembles the swallow, but that it flies higher, and always soars in the ærial regions‡.

Though Marcgrave ranges it among the birds of Brazil, there is no reason to suppose that it exists in America; at least no European vessels have ever imported it from thence. Besides, that naturalist does not, as usual, mention the name which it receives in the languages of the Brazilians, and a bird, clothed in such delicate swelling plumage, could not traverse the wide expanse of ocean which divides the equatorial parts of the two continents.

The ancients seem to have been totally unacquainted with the Bird of Paradise: no mention is ever made of its rich decorations. Belon pretends that it was the phoenix of antiquity; but his opinion is founded on the fabulous qualities of both §. The phoenix, too, appeared

* Some open the belly with a knife, as soon as they drop, and, having detached the entrails with a part of the flesh, they introduce into the cavity a red-hot iron; after which they dry the bird in the chimney, and sell it for a low price to the merchants. HELBIGIUS.

† Bontius.

‡ *Navig. aux Terres Austr.* tom. ii. p. 252.

§ “It has a golden brilliancy about its neck; its other parts, are purple,” says Pliny, speaking of the Phoenix; then he adds, “no person ever saw it feed.”; Lib. x. 2.

in Arabia and Egypt, while the Bird of Paradise has remained always attached to the Oriental parts of Asia, which were very little known to the ancients.

Clusius mentions, on the authority of some mariners, who themselves learned the fact from report, that there are two kinds of this bird; the one large and beautiful, which inhabits the islands of Arou; the other inferior to it in size and elegance, which is settled in the country of the Papous, next Gilolo*. Helbigius, who heard the same in the islands of Arou, adds, that the Birds of Paradise of New Guinea, or of the Papous, differ from those of Arou, not only in point of size, but also in the colours of the plumage, which is white and yellowish. I should regard these authorities as suspicious, and insufficient to found any general conclusion. The dried specimens indeed, which are brought to Europe, present great diversity of appearance; in size, in the number and position of the feathers, in the colours of the plumage, &c. But, in such mutilated and imperfect preparations, it is impossible to decide what must be ascribed to the effect of age, of sex, of season, of climate, and of other accidental causes. Besides, the Birds of Paradise

* J. Otto Helbigius speaks of the species which is found in New Guinea, as not having in its tail the two long filaments which appear in that of the species of the Arou islands.

being very expensive articles of commerce, many other birds, with long tails and an elegant plumage, have been passed on the credulity of the public, and the legs and thighs pulled off, to conceal the fraud and enhance the price. We have already had an example in the Paradise Roller, mentioned by Edwards, on which the honours of mutilation had been conferred. I have myself seen several paroquets, promerops, and other birds, which had been thus treated, and many instances are to be found in Aldrovandus and Seba: and it is very common to disfigure the real Birds of Paradise, with a view to add to their value. I shall therefore take notice only of two principal species of these birds, without venturing to vouch for the accuracy of that division till new observations illustrate the matter*.

* Specific character of the *Paradisea Apoda* of LINNÆUS:—
 “The feathers on the flanks are longer than the body; the two
 “middle tail-quills long and hairy.”

The MANUCODE.

Paradisea Regia, Gmel.

Manucodiata Minor, Briss.

Rex Avium Paradisearum, Gaza, Seba, Clusius, &c.

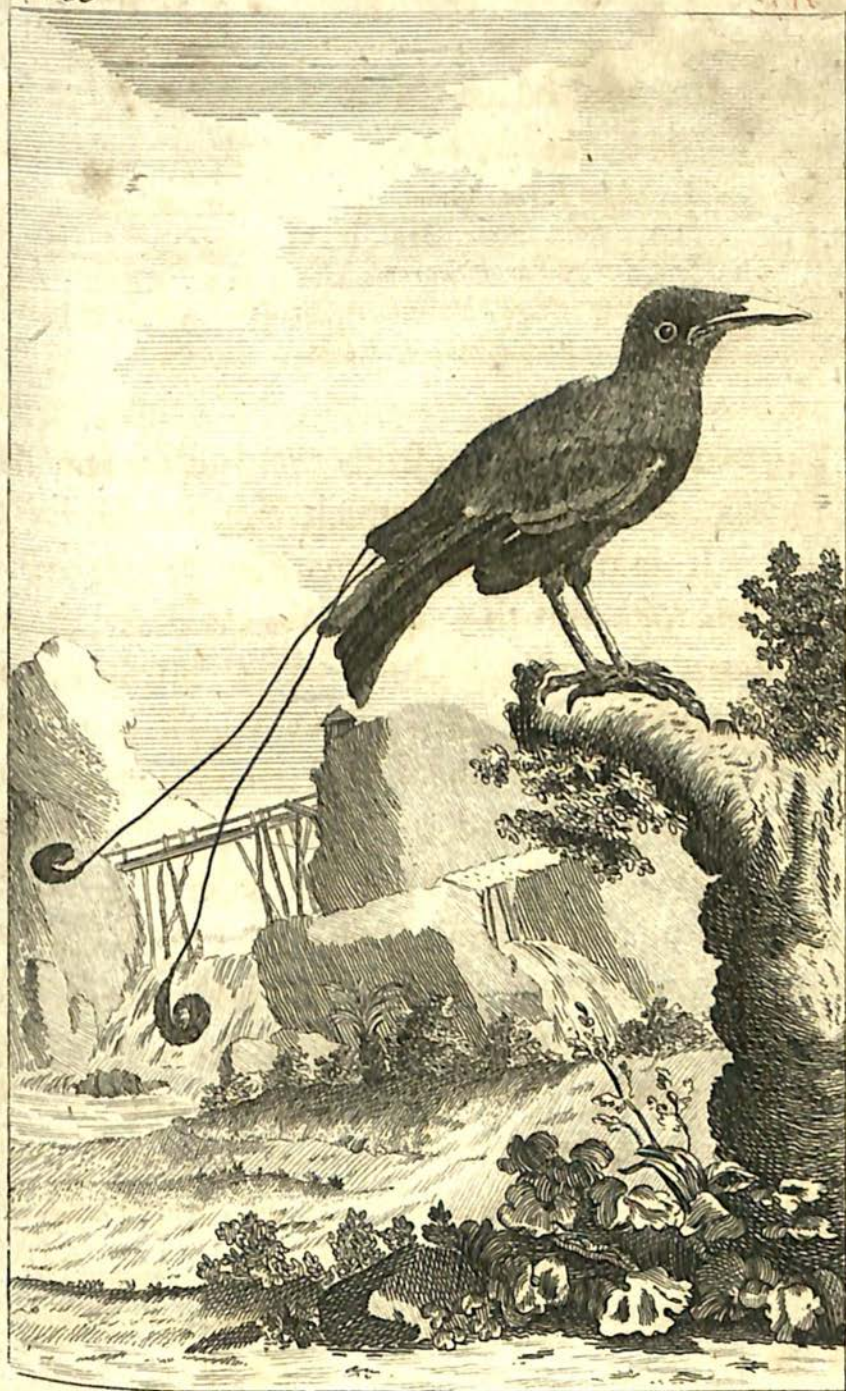
The King's Bird, Forrest.

The King Paradise Bird, Lath.

I ADOPT this name from the Indian appellation *Manucodiata*, which signifies *Bird of God*. It is usually called *the King of the Birds of Paradise*; but this appellation is drawn from fabulous accounts. Clusius was informed by the mariners, from a tradition which prevailed in the East, that each of the two species of the Birds of Paradise had its leader, whose imperial mandates were received with submissive obedience by a numerous train of subjects: that his majesty always flew above the flock, and issued orders for inspecting and tasting the springs, where they might drink with safety, &c. * This ridiculous fable is what alone consoles Nieremberg for the loss of the multitude of vulgar opinions which Clusius has erased from the history of birds; and this, by the

* This may allude to the method by which the people of India sometimes take whole flocks of birds, by poisoning the fountains to which they resort and drink.

N^o 69



THE KING PARADISE.

way, may serve to fix our idea of that compiler's judgment.

The King Bird of Paradise resembles much the rest. Like them, his head is small, his eyes still smaller, placed near the corner of the opening of the bill; his feet pretty long and firm; the colours of his plumage glossy; the two filaments of his tail nearly similar, except that they are shorter, and their extremity, which is furnished with webs, forms a curl, by rolling into itself, and is ornamented with spangles, resembling in miniature those of the peacock*. He also has beneath the wing, on each side, a bunch of seven or eight feathers, which are longer than in most birds; but not so long as those of the Bird of Paradise, and of a different shape, for they are edged through their whole extent with webs of adhering filaments. The Manucode is smaller, the bill white and long in proportion; the wings are also longer, the tail shorter, and the nostrils are covered with feathers.

Clusius counted only thirteen quills in each wing, and seven or eight in the tail; but he did not consider that in a dried specimen these might be complete. The same author remarks as a singularity, that in some the two filaments of the tail cross each other, though this might

* *Collection Academique*, tom. iii. *Part. Etran.* p-449.

often happen from accident, considering their flexibility and their length *.

* Specific character of the *Paradisea Regia* of Linnæus:—
 “The two middle tail-quills are thread-like, their tip of a
 “crescent-shape, and feathery.”

M

The MAGNIFICENT BIRD OF PARADISE †.

Le Magnifique de la Nouvelle Guinée, ou Le Manucode à Bouquets
 Buff.

Paradisea Magnifica, Gmel.

The two tufts (*bouquets*) which I regard as the distinctive character of this bird, appear behind the neck and at its origin. The first consists of several narrow feathers of a yellow colour, marked near the point with a small black spot, and which, instead of lying flat as ordinary, stand erect, those near the head at right angles, and the succeeding ones with smaller inclinations.

Under the first tuft we perceive a second, which is larger, but not so much raised, and more reclined: it is composed of long detached filaments, which sprout from very short shafts, and of which fifteen or twenty join together,

† This bird bears some relation to the *Manucodiata-Cirrhat* of Aldrovandus. The latter has a similar tuft, formed in the same way of unwebbed feathers, but which appears longer, and its bill and tail are much longer.

forming

forming straw-coloured feathers. These feathers seem to be cut square at the end, and make angles, more or less acute, with the plane of the shoulders.

This second tuft is bounded on the right and left by common feathers, variegated with brown and orange, and is terminated behind by a reddish and shining brown spot, of a triangular shape, with the vertex turned towards the tail, and the filaments of the feathers loose and decomposed, as in the second tuft.

Another characteristic feature of this bird is the two filaments of the tail, which are about a foot long and a line broad, and of a blue colour, changing into a lucid green, and taking their origin above the tail. So far they much resemble the filaments of the preceding species, but are of a different form, for they do not end in a point, and are furnished with webs on the middle only of the inner side.

The middle of the neck and breast is marked from the throat by a row of very short feathers, displaying a series of small transverse lines, which are alternately of a fine light green, changing into blue, and of a deep duck-green.

Brown is the prevailing colour on the lower belly, the rump, and the tail; rusty yellow is that of the quills, the wings, and of their co-

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verts; but the quills have more than one brown spot at their extremity, at least this is the case in the specimen preserved in the Royal Cabinet; for it may be proper to mention that the long quills of the wings, as well as the feet, have been removed*.

This bird is rather larger than the preceding; its bill is similar, and the feathers of the front extend over the nostrils, which they partly cover: this is inconsistent with the character that has been established of these birds by one of our most intelligent ornithologists†.

The feathers of the head are short, straight, close, and very soft to the touch. They form a sort of velvet of a changing colour, as in almost all the Birds of Paradise, and of a brownish ground. The throat is also covered with velvet feathers; but these are black, with golden-green reflections. [A]

* I know not whether the individual observed by Aldrovandus had the number of wing-quills very complete; but this author says that these quills were of a blackish colour.

† The feathers at the base of the bill turned back, and leaving the nostrils bare. BRISSON.

[A] Specific character of the *Paradisea Magnifica*:—"It is scarlet above; the upper part of its throat green, with golden crescents; the neck bearing a bunch of yellow feathers."

M

The

The BLACK MANUCODE of NEW
GUINEA, called the SUPERB.

Paradisea Superba, Gmel.

The Superb Paradise Bird, Lath.

The predominant colour of the plumage of this bird is a rich velvet black, decorated under the neck with reflections of deep violet. Its head, breast, and the hind part of its neck, are brilliant, with the variable shades of a fine green; the rest is entirely black, not even excepting the bill.

I place this bird immediately after the Birds of Paradise, though it wants the filaments of the tail; but we may suppose that moulting, or some accidental cause, is the reason of this defect; for in other respects it resembles these birds, not only in its general shape, and in that of its bill, but is also related by the identity of climate, by the richness of its colours, and a certain superabundance or luxuriancy of feathers which is peculiar to the Birds of Paradise: for there are two small tufts of black feathers which cover the nostrils, and two other bunches of the same colour, but much longer, and directed to the opposite extremity. These rise on the shoulders, and spreading more or less over the back, but always bent backwards, form a

fort of wings, which extend almost to the extremity of the true, when these are closed.

We must add, that these feathers are of unequal lengths, and that those of the anterior surface of the neck and the sides of the breast are very long and narrow. [A]

[A] Specific character of the *Paradisæa Superba*:—"It is somewhat crested with a gold-green; below, it is a lively green; the upper part of the throat violet; its wings black; its tail blue and shining."

M

The SIFILET, or MANUCODE with Six Filaments.

Paradisæa Aurea, Gmel.

The Gold-breasted Bird of Paradise.

If we adopt the filaments as the specific character of the Manucodes, the present is entitled to be ranged at their head; for instead of two, it has six, and of these not one rises on the back, but all of them take their origin from the head, three on each side. They are half a foot long, and reflect backwards. They have no webs but at their extremity for the space of six lines, and these are black and pretty long.

Besides these filaments, this bird has two properties which belong to the Bird of Paradise; luxuriance of feathers and richness of colours.

The

The luxuriancy of feathers consists; 1. In a sort of tuft composed of stiff narrow feathers, and which rises at the base of the upper mandible. 2. In the length of the feathers of the belly and of the abdomen, which is four inches or more; one part of these feathers, extending directly, conceals the under-side of the tail, while another part, rising obliquely on each side, covers the upper surface of the tail as far as the third of its length, and all of them correspond to the subalar feathers of the Bird of Paradise, and of the Manucode,

With regard to the plumage, the most brilliant colours appear on the neck; behind, it is gold-green and bronze violet; before, topaz-gold reflections, which wanton in all the shades of green, and derive new lustre from the contrast with the darkness of the contiguous parts; for the head is black, changing into a deep violet, and the rest of the body is brown, inclining to black, and with reflections of the same deep violet.

The bill of this bird is nearly the same as in the Birds of Paradise; the only difference is, that its upper ridge is angular and sharp, while in most of the other kinds it is rounded.

Nothing can be said with respect to the feet and the wings, because they were extirpated in the subject from which this description is drawn; a practice which, as we have re-

marked, is usual with the Indian hunters or merchants. [A]

[A] Specific character of the *Paradisæa Aurea*:—"It is
"crusted with black; the top, the cheeks, and the upper part
"of its throat are glistening violet; the rest of the throat, the
"breast, and the spot on the neck, gold-green."

M

The CALYBE' of NEW GUINEA*.

Paradisæa Viridis, Gmel.

The Blue Green Paradise Bird, Lath.

If this bird has not the luxuriant plumage of the Paradise tribe, it has at least the rich colours and the peculiar softness of texture.

Its head is covered with a beautiful blue velvet, changing into green, and exhibiting the reflections of the beryl. The neck is clothed with a longer shag, but which dazzles with the same colours, except that each feather, being of a shining black in the middle, of a green changing into blue only at the edges, there result waving shades, which play still more than those of the head. The back, the rump, the tail and the belly are blue, like polished steel, and with very brilliant reflections.

* The name *Calybè*, or Calybete, was given by Daubenton the younger, to express the chief colour of its plumage, which is a bronzed steel. To the same gentleman we owe the elements of the descriptions of these four new species.

The

The small velvet feathers on its forehead project forwards as far as the nostrils, which are deeper than in the preceding kinds. The bill is also longer and thicker, but it is of the same shape, and its edges are scalloped in the same manner near the point. Six quills only are reckoned in the tail, but probably it was not entire.

In the subject on which this description is founded, as well as those of the three preceding descriptions, a stick was passed through their whole length, and projected two or three inches out of the bill*. In that simple way, and by extirpating the feathers which would spoil the effect, the Indians can in an instant form an elegant sort of plume with any small bird which they meet. But the specimens are thus deranged, and their proportions altered. On this account it was difficult to discover in the Calybé the insertion of the wings; insomuch that credulity might have asserted that this bird had neither feet nor wings.

The Calybé differs from the *Manucodes* more than the preceding: for this reason I have ranged it in the last place, and bestowed on it a particular name†.

* They were brought from India by M. Sonnerat, correspondent of the king's cabinet of natural history.

† Specific character of the *Paradisea Viridis*:—"It is sea-green; its back, belly, rump, and tail, steel-coloured." It is sixteen inches long.

The O X - P E C K E R.

Le Pique-Bœuf, Buff.*Buphaga Africana*, Linn. and Gmel.*Buphaga*, Briss.*The African Beef-eater*; Lath.

BRISSE is the first who has described this little bird, which Adanson brought from Senegal. It is scarcely larger than the crested lark, and its wings extend only fourteen inches. Its plumage has nothing remarkable; in general a grayish brown prevails on the upper part of the body, and grayish yellow on the under. The bill is not of an invariable colour; in some individuals it is entirely brown; in others red at the point, and yellow at the base; in all it is nearly of a quadrangular shape, and the points of the two mandibles are reflected in a contrary direction. The tail is tapered in steps, and a singular circumstance is observed, that the twelve quills, of which it consists, are all pointed. Lastly, the first *phalanx* of the exterior toe is closely connected to that of the mid-toe.

This bird is very fond of certain worms, or the *larvæ* of insects, which lodge under the epidermis in oxen. It alights on the backs of these animals, and pierces their skin with its bill, to extract these worms, and hence its name.



THE AFRICAN BEEF-EATER,



THE STARE .

The COMMON STARE*.

L'Etourneau, Buff.

Sturnus Vulgaris, Linn. Gmel. Scop. Kram, &c.

Sturnus, Gesner, Belon, Aldrov. Briss. &c.

The Stare, or Starling, Will. Ray. Sibb. Alb. Penn, &c.

FEW birds are so generally known, especially in the temperate climates, as the Stare; for as it is a constant resident of the district where it settles †, and as it can be trained in the domestic state, its habits have been observed, whether when subjected to restraint, or ranging without controul.

The Blackbird is that, of all the feathered race, which the Stare resembles the most; their

* In Greek *Ψαγίς*, whence the name for Granite, *Ψαρονίον*, the spotted surface of that stone resembling the plumage of the Stare; it had also the appellations, *Αγρᾶλος*, *Βαθός*, *Γολμύς* or *Ψολμύς*: in Latin, *Sturnus* or *Sturnellus*: in Hebrew, *Sarsir*, or *Zezir*: in Arabic, *Alzarazir*, *Zarater*, *Azuri*: in Italian, *Sturno*, *Storno*, *Stornello*: in Portuguese, *Sturnino*: in Spanish, *Estornino*: in German, *Staar*, *Starn*, *Sprache*, *Rinder-Starn* (Ox-Stare); in Flemish, *Spreuwe*, *Sprue*: in Polish, *Szpak*, *Spatzek*, *Szpaczek*, *Skorzek*.

† In the colder countries, however, such as Sweden and Switzerland, it is migratory. "It descends after the middle of summer into the low lands of Scania," says Linnæus, *Fauna Suecica*, p. 70.: "when they leave our country," says Gesner, *de Avibus*, p. 745.

young

young can hardly be distinguished *: but after their characters are developed, the Stare is found to be distinguished by the streaks and reflections of its plumage; by the blunter form of its bill, which is broader, and not scalloped near the point †; and by the greater flatness of its head, &c. But another very remarkable difference, and which is derived from a more intimate cause is, that the species of the Stare is solitary in Europe; whereas the species of the Blackbird are extremely numerous.

There is another circumstance also in which these birds are analogous; they never change their residence during the winter. They only seek for those spots in the tract where they are settled that have the best aspect, and are in the neighbourhood of springs ‡; with this difference, however, that the Blackbirds still continue to live solitary; whereas the Stares assemble after the breeding season, in very numerous flocks: these fly in a peculiar manner, which would

* BELON. So exact is the resemblance between the young of these two species, that I once knew a law-suit grounded upon it. The appellant produced a well-trained blackbird, and demanded the recompence stipulated for rearing and educating it; but the defendant insisted, that the young bird which he had committed in charge was a Stare.

† Barrere says, that the Stare has a quadrangular bill. He must at least allow that the angles are very round.

‡ This has probably led Aristotle to say, that the Stare conceals itself well in winter.

scem

seem to be directed by a sort of tactics. It is the voice of instinct which incessantly impels the Stares toward the centre of the battalion, while the rapidity of their motions hurries them beyond it; a sort of vortex is thus formed, denser at the middle, and rarer near the verge; and the collective body performs an uniform circular revolution, and at the same time continues to make a progressive advance. This mode of flying has its advantages and its inconveniencies. The rapacious tribe is disconcerted by the whirling of the Stares, alarmed by their noisy cries, and deterred by the appearance of order. But the danger is increased of falling a prey to the arts of man: the bird-catcher fixes a packthread besmeared with bird-lime to each foot, and thus discharges one or two Stares; these mingle in the flock of their companions, and in their frequent gyrations and rencounters entangle others, and a number of victims, after wasting their efforts, tumble headlong to the ground.

The evening is the time when the Stares assemble in the greatest numbers, to provide more effectually against the dangers of the night; which they commonly spend among the reeds, whither they hasten about the close of the day, in a noisy flight *. They chatter much in the

* OLINA. He compares the noise of their passage through the air to the rattling of hail.

evening and morning, at the forming and dispersing of their forces ; are less clamorous during the rest of the day, and quite silent during the night.

So attached are the Stares to society, that they not only join those of their own species, but also birds of a different kind. In the spring, before the breeding season, they often associate with the crows and jackdaws, and even with the red-wings and field-fares, and sometimes with the pigeons.

Their loves commence about the end of March. Violence decides their choice : they continue as noisy as ever ; their twitter is incessant ; and to sing and toy seem then their sole occupation. The care of the expected progeny succeeds ; but they are not over-anxious in providing for the reception. They often take possession of the nest of a wood-pecker, which often retaliates in its turn. When they would construct one for themselves, they only heap a few dry leaves, some herbage or moss, in the hole of a tree or of a wall. In this artless bed the female drops five or six eggs, of a greenish ash-colour, and covers them for the space of eighteen or twenty-one days. Sometimes she hatches in dove-cotes, in the roofs of dwelling-houses, and even in the holes of rocks on the sea-coast, as in the Isle of Wight and in

in other places *. I have sometimes received, in the month of May, nests which were pretended to belong to the Stare, and to be found in trees ; but as two of them resemble exactly those of the Thrush, I suspect that the persons whom I employed wanted to impose on me, unless we suppose that the Stare had dispossessed the Thrush, and occupied its place. In some cases, however, they make their own nests ; a skilful observer told me, that he has seen several of them on the same tree. The young continue long with their mother, which would make me doubt the assertion of some authors †, that the Stare hatches thrice a-year ; except this relate to warm countries, where the progress of incubation and of growth is rapid.

The feathers of the Stares are in general long and narrow, as Belon describes ; their colour is at first of a blackish-brown, uniform, and without streaks or reflections. The streaks begin to appear after the first moulting, emerging about the end of July, on the lower part of the body, then on the head, and towards the 20th of August, are spread over the upper part of the body. I always mean the young Stares, which were hatched in the beginning of May.

I have remarked, that in this first moulting, the feathers which surround the base of the

* British Zoology.

† “ It has two or three hatches annually, each consisting of four or five young.” OLINA, *Uccelliera*.

bill, dropped almost all at once, so that this part was bald during the month of July *, as it happens constantly in the rook through the rest of the year. I also observed that the bill was almost all yellow on the 15th of May; this soon changed into a horn colour, and Belon assures us, that in time it becomes orange.

In the males, the eyes have a larger share of brown, or it is more uniform †; the streaks of the plumage more distinct and yellower; and the dark colour of the feathers which are not streaked is brightened by more vivid reflections, that vary between purple and deep green. Besides, the male is larger, weighing three ounces and a half. Salerne adds, another distinguished character of the sex is, that the tongue is pointed in the male, but forked in the female. It would appear that Linnæus had seen it pointed in some individuals, and forked in others ‡. In those which came under my examination, it was forked.

The Stares live on snails, worms, and caterpillars; especially on those large caterpillars of

* I know not why Pliny, speaking of the Stares, says, "But these lose not their feathers." Lib. x. 24.

† "The female has a little mail in the pupil of the eyes, which in the male is entirely black." OLINA.—Willughby seems also to allude to this slough on the eye; "The irides are hazel, the upper part whiter," where he must probably mean the female.

‡ *Lingua Acutâ*. Syst. Nat. Edit. x.—*Lingua bifidâ*, Fauna Suecica.

fine green, with reddish reflections, which appear, in the month of June, upon the flowers, and chiefly upon the roses. They feed also on wheat, buckwheat, millet, panic, hemp-seed, elder-berries, olives, cherries, raisins, &c. It is pretended that the last is what corrects best the natural bitterness of their flesh, and that cherries are what they are the fondest of*; and these afford an almost infallible bait for weel-nets, which are laid among the reeds, where they retire in the evenings; and in this way an hundred may often be caught in one night: but this diversion lasts no longer than the season of cherries.

They are fond of following oxen and other large cattle as they feed in the meadows, attracted, it is said, by the insects which flutter round them, or by those, perhaps, which swarm in their dung, or in meadows in general. From this habit is derived the German name *Rinder-Staren*. They are also accused of feeding on the carcasses that are exposed on gibbets†; but it is probably in search only of insects. I have raised some of these birds, and have observed, that when bits of raw flesh were offered to

* Schwenckfeld, Salerne, &c. Cardan says, that to sweeten the flesh of Stares, we need only cut off their head as soon as they are killed: Albin directs them to be flayed: others allege, that the mountain Stares are better tasted than those of the plains. But these authors can only mean the young birds, for the flesh of the old ones is always bitter and unpalatable.

† Aldrovandus.

them, they fixed on the prey with great avidity. If they were presented with the flower-cup of a pink, containing feed already formed, they did not grasp it with their claws, and pluck it like the jay, but shook it and struck it against the bars in the bottom of the cage, till the grains dropped out. I remarked also, that they drank nearly like the gallinaceous tribe, and took great delight in bathing. It is probable that one of those which I raised died of cold, in consequence of bathing too often during the winter.

These birds live seven or eight years, or even longer, in the domestic state. The wild ones cannot be decoyed by the call, because they regard not the scream of the owl. But besides the contrivance of the limed threads and the wheel-nets, which I have already mentioned, a method has been fallen on to take entire families, by fixing to the walls and the trees where they lodge pots of earthen ware of a convenient form, which the birds often prefer to place their nests in*. Many are also caught by the gin and draw-net. In some parts of Italy it is common to employ tame weasels to drag them out of their nests, or rather their holes; for the artifice of man consists in employing one enslaved race to extend his dominion over the rest.

The Stares have the *membrana nictitans*; their nostrils are half-sheathed by a membrane; the

* Olina and Schwenckfeld.

legs are of a reddish brown *; the outer toe is connected to the mid one as far as the first *phalanx*; the hind nail is stronger than the rest; the gizzard is preceded by a dilatation of the *œsophagus*, is a little fleshy, and contains sometimes small stones. The intestinal tube is twenty inches in length, from the one orifice to the other; the gall-bladder is of the ordinary size; the *cæca* very small, and placed nearer the anus than is common in birds.

In dissecting a young Stare, one of those which I had raised, I remarked that the contents of the gizzard and of the intestines were entirely black, though it had been fed on bread and milk only. This circumstance denotes an abundance of black bile; and at the same time accounts for the bitterness of the flesh of these birds, and the use which has been made of their excrements in the preparation of cosmetics.

The Stare can be taught to speak either French, German, Latin, Greek †, &c. and to pronounce phrases of some length. Its pliant throat accommodates itself to every inflexion and every accent. It can readily articulate the letter R ‡,

* I know not why Willughby says that "the legs are feathered to the toes." I never found this in any of the Stares which I examined.

† "The young Cæsars had a Stare and Nightingales docil in the Greek and Latin languages, and which made continual progress, and assiduously prattled new phrases of considerable length." PLINY, lib. x. 42.

‡ Scaliger.

and acquires a sort of warbling which is much superior to its native song*.

This bird is spread through an extensive range in the ancient continent. It is found in Sweden, Germany, France, Italy, the Isle of Malta, the Cape of Good Hope †, and every where nearly the same; whereas those American birds which have been called Stares, present a great diversity of appearance. [A]

* *Sturnus pistat ore, isitat, pisttrat*: It was thus that the Latins expressed the notes of the Stare. See the *Author of Philomela*.

† Kolben.

[A] Specific character of the Stare, *Sturnus Vulgaris*, LINN.
 ——" Its bill is yellowish, its body black, with white points."
 It is near nine inches long, and its alar extent fourteen inches.
 The male weighs three ounces, the female somewhat less.

M

VARIETIES of the STARE.

Though the Stares retain uniformly the original impression, they are not entirely exempted from the tendency to variety in nature; but the varieties which occur are always superficial, and often confined to individuals. The following have been noticed by authors:

I. The WHITE STARE of Aldrovandus ‡, with flesh-coloured legs and a reddish yellow

‡ *Sturnus Vulgaris*. var. 1. Linn. and Gmel.; *Sturnus Albus*, Briss.; the *White Starling*, Will.

bill,

bill, as in the common kind after they have grown old. Aldrovandus says, that it was taken along with the ordinary Stares; and Rzaczynski informs us, that in a certain part of Poland * it was usual to see a Black and a White Stare rising from the same nest. Willughby also speaks of two White Stares which were observed in Cumberland.

II. The BLACK and WHITE STARE.—To this variety I refer; 1. The White-headed Stare of Aldrovandus †: In this bird, the head, the bill, the neck, the whole of the under part of the body, the coverts of the wings, and the two exterior quills of the tail, were white; the other quills of the tail, and all those of the wings, were as in the ordinary Stare; the white of the head was set off by two small black spots placed above the eyes, and the white of the under part of the body was variegated with bluish spots. 2. The Pied Stare of Schwenckfeld, in which the top of the head, the half of the bill next the base, the neck, the quills of the wing, and those of the tail, were black, and all the rest white. 3. The Black-headed Stare, seen by Willughby, the rest of the body entirely white ‡.

* Near Coronovia.

† *Sturnus Vulgaris*, var. 3. Linn. and Gmel.; *Sturnus Leucoccephalus*, Briss.

‡ *Sturnus Vulgaris*, var. 2. Linn. and Gmel.; *Sturnus Leucomelas*, Briss.; the Black and White Starling, Will.

III. The GREY CINEREOUS STARE of Aldrovandus *. This author is the only person who has seen one of that colour, which is nothing but black melted with white. It is easy to conceive how these varieties might be multiplied from the different distribution of the black and white, and from the numerous shades of gray, which result from the different proportions in which the two original colours enter into the mixture.

* *Sturnus Vulgaris*, var. 4. Linn. and Gmel; *Sturnus Cinereus*, Briss.

FOREIGN BIRDS, RELATED TO THE STARE.

I.

The CAPE STARE, or the PIED STARE.

Sturnus Capensis, Linn. & Gmel.

THIS African bird resembles in its general shape the Common Stare, and the black and white colours of its plumage are distributed as in the Magpie.

Were it not that its bill is thicker and longer than in the European Stare, we might regard it as merely a variety, especially as our Stare is to be met with at the Cape of Good Hope; and this variety would coincide with the one already mentioned, in which the black and white are distributed in large spots. The most remarkable character in this bird is a very large white spot, of a round shape, placed on each side of the head, and which stretches forward to the base of the bill, and inclosing the eye shoots into a sort of appendix, variegated with black, that descends along its neck.

This bird is the same with Edwards's Black and White Indian Starling, Pl. 187.; with Albin's

Contra of Bengal, vol. iii. Pl. 31. ; with Brisson's Cape of Good Hope Stare, vol. ii. p. 448. ; and even with his ninth tropic bird. He acknowledges this, and rectifies it, p. 54. of the Supplement ; and considering the chaos of incomplete description, and of mutilated figures, which disgraces Natural History, he is certainly excusable. To avoid confusion, therefore, it is of the utmost importance to collate the different names which have been bestowed on a bird by different authors, and at different times*.

- * Specific character of the *Cape Stare* : — “ It is blackish, the sides of the head and the under part of the body white.” The other birds mentioned are considered by Mr. Latham as varieties ; but Gmelin is rather disposed to form them into a new species, the *Sturnus Contra*, whose character is, “ dusky, with a spot on the eye, a stripe on the wing, and the belly all white.”

II.

The LOUISIANA STARE, or the STOURNE.

Sturnus Ludovicianus, Linn. & Gmel.

I have applied the name of *Stourne*, which is formed from the Latin *Sturnus*, to an American bird, which, though considerably different, is allied to our Stare. The under part of its body is

is gray, variegated with brown, and the upper is yellow. The most characteristic marks of this bird, in respect to colour, are, 1. A blackish plate intermixed with gray at the lower part of the neck, and rising distinctly out of the yellow ground. 2. Three white bars on its head, which rise from the base of the upper mandible, and extend as far as the *occiput*; the one rests on the top of the head, while the two others, which are parallel to it, stretch on each side over the eyes. In general this bird resembles the European Stare, by the proportions of its wings and tail, and also by the dispersion of these colours in small spots: its head is likewise flat, but its bill is longer.

A correspondent of the Cabinet informs us, that Louisiana is much incommoded by clouds of these Stares; which would show that their manner of flying resembles that of the European sort. But we are not very certain if he means the species of this article*.

* Specific character of the *Louisiana Stare*: — “It is spotted with gray and dusky, a line on the head, and the eye-lids white; the upper part of its throat black.”

III.

The T O L C A N A*.

Sturnus Obscurus, Gmel.*Sturnus Novæ Hispaniæ*, Briss.*The Brown-head Stare*, Lath.

The short account which Fernandez has given of this bird is not only incomplete, but carelessly drawn up; for though he says that the Tolcana is, in size and figure, like the Stare, he afterwards adds that it is rather smaller. Yet he is the only original author from whom we can obtain information with regard to this bird, and on his evidence Brissón has ranged it among the Stares. It appears to me, however, that these two authors adopt very different characters of the Stare: Brissón, for instance, makes it the distinguishing feature of the genus; that the bill is straight, blunt, and convex; and Fernandez, speaking of a bird of the *Tzanatl* or *Stare* kind, mentions, that it is short, thick, and rather hooked; and in another place he refers the same bird named *Cacalototl* to the genus of the Raven (which is called *Cacalotl* in the Mexican

* Formed from the Mexican name *Tolocatzanatl*, which signifies Reed-stare.

language),

language), and to that of the Stare *. The arrangement of the *Tolcana* is therefore not determined; I have retained its Mexican name, without venturing to pronounce whether it is a Stare or not.

This bird is, like the European Stares, fond of places abounding in rushes and aquatic plants. Its head is brown, and the rest of its plumage black. It has no song, or even cry. In that it partakes of the qualities of many other American birds, which are more remarkable for the richness of their plumage than the sweetness of their warble †.

* “*Cacalototol*, or Raven Bird, seems to belong to the genus “*Tzanatl* of the Stares.”

This bird has, according to Fernandez, a black plumage inclining to blue, the bill entirely black, the iris orange, the tail long, the flesh bad to eat, and no song. It loves temperate and warm countries. From this short statement, it is difficult to decide whether the bird in question be a Raven or a Stare.

† Specific character of the *Sturnus Obscurus* :—“ It is black, “ its head dusky.”

IV.

The C A C A S T O L †.

Sturnus Mexicanus, Gmel.

Cotinga Mexicana, Briss.

The Mexican Stare, Lath.

I here range this bird on the very suspicious authority of Fernandez, and the analogy which

† The Mexican name is *Caxcaxtototl*; it is also called *Hucitzanatl*. *Tzanatl* in the Mexican language corresponds to our Stare.

its

its name bears in the Mexican language to that of the Stare; nor am I acquainted with any European bird to which I can refer it. Briffon, who conceives it to be a *Cottinga*, has been obliged, in order to support his preconceptions, to reject from the description of Fernandez, already too short, the words which indicate the lengthened and pointed shape of its bill; this shape being really related more closely to the Stare than to the *Cottinga*. Besides, the *Castol* is nearly of the bulk of the Stare; and, like that bird, it has a small head, and is indifferent food; it likewise inhabits the temperate and warm regions. It is indeed a bad singer, but we have seen that the native notes of the European Stare are not very captivating; and, if it were carried into America, we may presume that its imitation of the harsh music of the forest would soon destroy every harmonious modulation*.

* Specific character of the *Sturnus Mexicanus*:—"It is sky-blue, variegated with black."

V.

The P I M A L O T †.

The broad bill of this bird might lead us to suspect that it is not a Stare; but if what Fernan-

† This word is formed from the Mexican name *Pitzmalotl*,

dez says be true, that its habits and instincts are the same with those of the other Stares, we cannot hesitate to infer that it is of an analogous species; especially as it generally haunts the coasts of the South Sea, lodging probably, like the European sort, among the aquatic plants.—The Pimalot is rather larger.

VI.

The STARE of TERRA MAGELLANICA, or, the WHITE RAY.

Sturnus Milibaris, Gmel.

The Magellanic Stare, Lath.

I have given this last name to a bird, brought by M. Bougainville, on account of the white ray which, rising on each side near the junction of the mandibles, bends under the eye and stretches along the neck. This white ray is the more remarkable, as it is environed by a deep brown; the dark colours prevail on the upper part of the body, only the wings and their coverts are edged with yellow. The tail is of a full black, forked, and extending not far beyond the wings, which are very long. The under side of the body, including the throat, is of a fine crimson red, sprinkled with black on the sides; the anterior

terior part of the wing is also of crimson, and not spotted; and the same colour appears round the eyes, and in the space lying between these and the bill, which, though blunt as in the Stares, and less pointed than that of the Troupiales, may be regarded as nearest the shape of the latter. If we consider also that the White Ray resembles much the appearance of the Troupiales, we may esteem it as intermediate between these two kinds *.

* Specific character of the *Sturnus Milibaris*:—"It is dusky, red below."

The TROUPIALES.

THESE birds, as I have just observed, are nearly related to the European Staes, and often the vulgar and the naturalists have confounded them. We may regard them as representing the Staes in the New World ; their habits are the same, except in the mode of building their nests.

The American continent is the native region of these birds, and of all others that have been classed with them ; such as the Cassics, the Baltimores, the Bonanas, &c. ; and though some are said to belong to the Old World, these have really been brought from the New World ; for instance, probably, the Troupiale of Senegal, called the *Cape-More* *, the Bonana of the Cape of Good Hope, and all the pretended Troupiales of Madras.

I shall exclude from the genus of the Troupiales, 1. The four species brought from Madras, and which Brisson has borrowed from Ray ; because the *law of climate* will not admit the supposition, and the descriptions are not decisive, and the figures so ill executed, that they might as well be taken for magpies, jays, black-birds, loriots, and gobe-mouches, &c.

* *Oriolus Textor*, Gmel ; the *Weaver Oriole*, Lath.

A skilful ornithologist (Mr. Edwards) is of opinion, that the yellow jay and the chop jay of Petiver, which Brisson has made his sixth and his fourth Troupiale, are only the male and female loriot; and that the variegated jay of Madras of the same Petiver, which is the fifth Troupiale of Brisson, is his yellow Indian Stare; and lastly, that the crested Troupiale of Madras, which is Brisson's seventh species, is the same bird with the crested gobe-mouche of the Cape of Good Hope of the same Brisson*.

2. I shall exclude the Bengal Troupiale, which is Brisson's ninth species, since that author has himself perceived that it is his second of the Stare.

3. I shall exclude the Forked-tail Troupiale, which is the sixth of Brisson, and the Thrush of Seba. All that the latter says is, that it is much larger than the thrush; that its plumage is black, its bill yellow, the under surface of its tail white, the upper and its back shaded by a light tint of blue; that its tail is long, broad, and forked; and lastly, that, excepting the difference in the shape of its tail, and in its bulk, it is much like the European thrush. But in all this, I can perceive nothing that relates to a Troupiale; and the figure given by Seba, and which Brisson rec-

* He adds, that the two long quills of the tail were wanting in these two individuals. They must either have not yet grown, or have dropped by moulting or some other accident.

cons a very bad one, no more resembles a Troupiale than it does a Thrush.

4. I shall exclude the Blue Bonana of Madras, because, on the one hand, it is inconsistent with the law of the climate, and on the other, the figure and description of Ray have nothing which would characterise the Bonana, not even the plumage. According to that author, its head, tail, and wings are blue, but the tail of a brighter tinge; the rest of the plumage black or cinereous, except the bill and the feet, which are rusty.

5. Lastly, I shall exclude the India Troupiale, not only on account of the difference of climate, but for other stronger reasons, which before induced me to place it between the Rollers and the Birds of Paradise.

Though we have ranged along with the Troupiales, the Cassies, the Baltimores, and the Bonanas, these, as they have received separate names, are distinguished by differences that are sufficiently important to form small subordinate *genera*. I am able, from the comparison of a number of these birds, to assert that the Cassies have the strongest bill, next to them the Troupiales, and then the Bonanas. With respect to the Baltimores, their bill is not only smaller than in the rest, but it is straighter, and of a peculiar shape. They seem also to have different instincts; I therefore retain their proper names, and treat of each separately.

The common characters which Briffon ascribes to them are the naked nostrils, and the elongated conical form of the bill. I have already observed that the upper mandible extends over the cranium, or that the tuft, instead of making a point, makes a considerable re-entrant-angle; a circumstance which sometimes occurs in other species, but is most remarkable in the present.

The TROUPIALE*.

Oriolus Iæericus, Gmel.

Iæerus, Briss.

Coracias Xanthornus, Scop.

The Yellow and Black Pye, Catesby.

The Banana Bird from Jamaica, Albin.

The Iæeric Oriole, Lath.

The most obvious features in the exterior appearance of this bird are its long pointed bill, the narrow feathers of its neck, and the great variety of its plumage: not only three colours enter into it, an orange-yellow, black and white, but these colours seem to multiply by their artful distribution. The black is spread over the head, the anterior part of the neck, the

* Briffon gave this bird the Latin name *Iæerus*, from its yellow colour; for the same reason Scopoli termed *Xanthornus*, or yellow bird; other authors have called it *Pica*, *Cissâ*, *Picus*, and *Turdus*. The savages of Brazil name it *Guira-Tangeima*; those of Guiana *Yapon*; the French colonists *Cul-jaune*, or yellow-bottom.

middle



70
72



THE ICTERIC ORIOLE.

middle of the back, the tail and the wings; the orange-yellow occupies the intervals, and all the under part of the body; it appears also in the iris *, and on the anterior part of the wings; the black which prevails through the rest is interrupted by two oblong white spots, of which the one is placed at the coverts of the wings, the other on their middle quills.

The feet and nails are sometimes black, sometimes of a leaden colour. The bill seems to have no constant colour; for it has been observed to be in some white gray †, in others brown cinereous above ‡, and blue below; and lastly, in others black above, and brown below §.

This bird is nine or ten inches long from the point of the bill to the end of the tail; and, according to Marcgrave, its wings extend fourteen inches, and its head is very small. It is dispersed through the region lying between Carolina and Brazil, and through the Caribbean islands. It is of the bulk of a blackbird; it hops like the magpie, and has many of its gestures, according to Sloane. It has even, according to Marcgrave, the same cries; but Albin asserts that in all its actions it resembles the Stare; and adds, that sometimes four or five unite to attack a larger bird, which, after they have killed, they devour

* Albin adds, that the eye is encircled by a broad bar of blue; but he is the only person who has made this remark; it was probably an accidental variety.

† Brisson.

‡ Albin.

§ Sloane and Marcgrave.*

orderly, each maintaining his rank. Sloane, an author worthy of credit, says, that the Troupiales live on insects. Yet there is no absolute contradiction; for every animal which feeds on the smallest reptile is rapacious, and would feed on larger animals if it could do it with safety.

These birds must be of a very social disposition, since love, which divides so many other societies, seems on the contrary to knit theirs more closely together. They do not separate to accomplish in retirement and secrecy the views of nature; a great many pairs are seen on the same tree, which is almost always lofty and sequestered, constructing their nest, laying their eggs, hatching and cherishing their infant brood.

These nests are of a cylindrical form, suspended from the extremity of high branches, and waving freely in the air; so that the young are continually rocked. But some who believe that the birds act from deliberation, assert that the parents hang their nest to avoid the attack of certain land animals, and especially serpents.

The Troupiale is also reckoned very docile, and easily subjected to domestic slavery; which propensity almost always attends a social temper*.

* Specific character of the *Oriolus Ilericus*:—"Fulvous; the head, throat, back, the wing-quills, and coverts, black, with a white spot on the wings."

The ACOLCHI of SEBA*.

Oriolus Novæ Hispaniæ, Gmel.*Icterus Mexicanus*, Briss.*The Mexican Oriole*, Lath.

Seba, having found this name in Fernandez, has, according to his way, applied it arbitrarily to a bird entirely different from the one meant by that author, at least with regard to its plumage; and he has again ascribed to the same bird what Fernandez has said of the true *Acolchi*, which the Spaniards call *Tordo*, or *Stare*.

This false *Acolchi* of Seba has a long yellow bill; its head is all black, and also its throat; the tail and wings are blackish, and these are ornamented with small feathers of a golden colour, which have a fine effect on the dark ground.

Seba reckons his *Acolchi* an American bird, and I know not for what reason Brisson, who quotes no authority but Seba, subjoins that it is most common in Mexico. It is certain that the word *Acolchi* is Mexican, but we are not warranted to conclude the same thing of the bird on which Seba bestows it †.

* Contracted for *Acolchichi*.

† Specific character of the *Oriolus N. Hispaniæ*:—"Yellow; the head, upper part of the throat, wing-quills and tail, black; the greater quills of the wings yellow at the tip, the lesser all black."

THE RING-TAILED ORIOLE, *Lath.*

L' Arc-en-Queue, Buff.

Oriolus Annulatus, Gmel.

Icterus Caudâ Annulatâ, Briss.

Cornix Flava, Klein.

Fernandez gives the name of *Ozinifcan* to two birds which bear no resemblance; and Seba has taken the freedom to apply the same name to a third entirely different from either, except in size, which is that of the pigeon.

The third *Ozinifcan* is the Ring-tail (*Arc-en-Queue*) of this article. I give it this name on account of a black arch or crescent with its concavity turned towards the head, which appears distinctly on the tail when spread, and the more remarkable, as this is of a fine yellow colour, which is also that of the bill and of the whole body; the head and neck are black, and the wings of the same colour, with a light tint of yellow.

Seba adds, that he received many of these birds from America, where they are looked upon as ravenous. Perhaps their habits are the same with those of our Troupiales; the figure which Seba gives has a bill somewhat hooked near the point*.

* Specific character of the *Oriolus Annulatus*:—"Yellow; the head and neck black, the greater coverts of the wings and their quills edged with yellowish; the tail blackish and tinged."

The JAPACANI*.

Oriolus Japacani, Gmel.*Luscinia pullo-lutea*, Klein.

Sloane considers his *Little Yellow and Brown Fly-catcher* as the same with the Japacani of Marcgrave; but besides the differences of the plumage, the Japacani is eight times larger, each dimension being double; for Sloane's bird is only four inches long, and seven over the wings, while Marcgrave's is of the bulk of the *Bemptère*, which is equal to that of the Stare, whose extreme length is seven inches, and its alar extent fourteen. It would be difficult to refer to the same species two birds, especially two wild birds, so widely different.

The Japacani has a long pointed black bill, a little curved; its head is blackish, its iris of a gold colour; the hind part of its neck, its back, its wings, and its rump, are variegated with black and light brown; its tail is blackish below, and marked with white above; its breast, its belly, its legs are variegated with yellow and white, with blackish transverse lines; its feet brown, its nails black and pointed †.

* This is the Brazilian name, according to Marcgrave.

† Marcgrave.

Sloane's little bird * has a round bill, almost straight, and half an inch long; the head and back are of a light brown, with some black spots; the tail eighteen inches long, and of a brown colour, as also the wings, which have a little white at their tips. The orbits, the throat, the sides of the neck, the coverts of the tail, yellow; the breast of the same colour, but with brown marks; the belly white; the legs brown, about fifteen lines long, and yellow in the toes.

This bird is common in St. Jago, once the capital of Jamaica; it lodges generally in the bushes. Its stomach is very muscular, and lined with a thin, loose, insensible membrane. Sloane found nothing in the gizzard of the individual which he dissected, but he observed that the intestines made a great number of circumvolutions.

The same author mentions a variety, which differs only because it has less yellow in its plumage.

This bird may be reckoned a Troupiale, on account of the form of its bill; but it is certainly different from the Japacani †.

* *Oriolus Brasiliensis*, Gmel.; *Icterus Brasiliensis*, Briss.; *Muscisapa e fusco et luteo varia*, Sloane; *the Brazilian Oriole*, Lath.

† Specific character of the *Japacani*.—"It is black and dusky, below variegated with white and yellow, with transverse black lines, the head and tail blackish." Specific character of Sloane's little Bird.—"It is yellow, the breast spotted, the head and back marked by soft dusky spots, the belly white, the tail and wings dusky, and the latter white at the tips."

The XOCHITOL and the COSTOTOL.

Oriolus Costotol, Gmel.

The New Spain Oriole, Lath.

Briffon makes the *Xochitol* of Fernandez the tenth species of his *Troupiale of New Spain*, and which the Spanish naturalist considers as only the adult *Costotol*. But he takes notice of two *Costotols*, which are pretty much alike; but if they differ in some degree, we must refer what Fernandez says here to the *Costotol* of Chap. xxviii.

If we compare the description of the *Xochitol* of Chap. cxxii. to that of Chap. xxviii., we shall meet with contradictions which it will be difficult to reconcile; for is it possible that the *Costotol*, which when so much grown as to be able to sing is only of the size of a Canary bird; should afterwards acquire the bulk of a Starling? that when young it has the sweet warble of the Goldfinch, but after it is adult, and received the name of the *Xochitol*, it should have the disagreeable chatter of the Magpie? But wide differences also occur in the plumage; in the *Costotol*, the head and the under part of the body are yellow, while in the *Xochitol* they are black: in the former, the wings are yellow
tipped

tipped with black; in the latter, they are variegated with black and white above, and cinereous below, without a single yellow feather.

But all these contradictions will vanish, if, instead of the Xochitol of Chap. cxxii. we substitute the Xochitol or Flowery bird of Chap. cxxv. The size is nearly the same, being that of the Sparrow; its warble is pleasant, like that of the Costotol, the yellow of which is mingled with other colours that variegate the plumage of the former: they are both an agreeable food. The Xochitol resembles in two circumstances the Troupiales; it lives upon insects and seeds, and hangs its nest from the ends of small branches. The only difference which can be remarked between the Xochitol of Chap. cxxv. and the Costotol, is, that the latter is found in warm countries only, while the former inhabits all climates without distinction. But is it not likely that Xochitols go to breed in warm countries, where their young, or the Costotols, remain till they are grown up, or are Xochitols, and able to accompany their parents into colder climates? In the Costotol, the plumage is yellow, as I have said, and the tips of the wings black; and in the Xochitol of Chap. cxxv. the plumage is variegated with pale yellow, brown, white, and blackish.

Briffon has indeed made the latter his first *carouge*; but as it suspends its nest like the Troupiales, we have a decisive reason to range it

it with these; except we reckon as another Troupiale the Xochitol of Chap. cxxii. of Fernandez, which is of the size of a Stare; its breast, belly, and tail of a saffron colour, variegated with a little black; its wings variegated with black and white below and cinereous above; its head, and the rest of its body, black; it has the chatter of the Magpie, and its flesh is good eating.

M

The TOCOLIN*

Oriolus Cinereus, Gmel.

Icterus Cinereus, Briss.

The Gray Oriole, Lath.

Fernandez considered this bird as a Wood-pecker, on account of its long and pointed bill; but this character belongs also to the Troupiales, nor can I perceive in the description of Fernandez any other discriminating qualities of the Wood-peckers. I shall therefore leave it among the Troupiales, where Brisson has placed it.

It is of the bulk of a Stare; it lives in the woods, and nestles on trees. Its plumage is

* Its true name is *Oocölin*; but as I had appropriated it to another bird, I have here changed it, by prefixing the letter *T* of Troupiale.

beautifully

beautifully variegated with yellow and black, excepting the back, the belly, and the feet, which are cinereous.

The Tocolin is destitute of song, but its flesh is good; it inhabits Mexico*.

* Specific character of the *Oriolus Cinereus*:—"It is variegated with yellow and black; its back, thighs, and belly, cinereous."

M

The COMMANDER.

Oriolus Phæniceus, Linn. and Gmel.

Icterus Pterophæniceus, Briss.

The Scarlet-feathered Indian Bird, Will.

The Red-winged Starling, Catesby, Alb. and Kalm.

The Red-winged Oriole, Penn. and Lath.

This is the true Acolchi of Fernandez. It is called the Commander†, on account of a fine red mark on the anterior part of its wings, which in some measure resembles the badge of the order of knighthood. The effect is here the more striking, as it is thrown upon a ground of shining glossy black; for that is the general colour not only of its plumage, but of its bill, feet, and nails. There are, however, some slight exceptions; the iris is white, and the base of the bill is encircled by a narrow ring of red; the

† In Spanish, *Comendadoxa*.

bill also inclines sometimes to brown rather than black, according to Albin. But the real colour of the mark on the wings is not a pure red, according to Fernandez, but is tarnished with a rufous tint, which increases and becomes at last the predominant colour. These sometimes separate, the red occupying the anterior and the more elevated part of the spot; yellow, the posterior and lower. But is this true with regard to all the individuals, or has not that been ascribed to the whole species which is applicable only to the females? We are certain that in these the spot on the wings is not of so bright a red; besides that distinction, the black of their plumage is mixed with gray, and they are smaller.

The Red-Wing is nearly of the size and shape of the Stare; its extreme length is eight or nine inches, and its alar extent thirteen or fourteen; it weighs three ounces and a half.

• These birds inhabit the cold as well as the warm countries: They are found in Virginia, Carolina, Louisiana, Mexico, &c. They are peculiar to the New World, though one was killed in the environs of London; but this had doubtless escaped from its cage. They can be easily tamed, and taught to speak; and they are fond of singing and playing, whether they be confined, or allowed to run through the house; for they are very familiar and lively.

The

The one killed near London was opened; in its stomach were found caterpillars, beetles, and maggots. But in America they feed on wheat, maize, &c. and are very destructive. They fly in numerous flocks, and, like the Stares of Europe, joining other birds equally destructive, as the Jamaica Magpies, they pour their famished squadrons on the standing crops and sown fields; but the havoc which they commit is by far greatest in the warm regions, and near the sea-coast.

When the planters fire on these combined flocks, birds fall of different kinds, and before the piece can be again charged, another flight arrives.

Catesby informs us, that in Carolina and Virginia they always breed among the rushes; they interweave the points of these so as to form a sort of roof or shed, under which they build their nest, and at so proper a height that it can never be reached by the highest floods. This construction is very different from that of our first Troupiale, and shews a different instinct, and therefore proves that it is a distinct species.

Fernandez pretends that they nestle on the trees near the plantations: Has this species different customs accommodated to the different countries where it is found?

The Red-Wings appear in Louisiana in the winter only, but they are then so numerous that three hundred have been sometimes caught in a
single

single draw of the net. For this purpose is used a long and very narrow net of silk, in two parts, like that for larks. "When they intend to spread it," says Le Page Dupratz, "they clear a place near the wood, and make a kind of path, which is smooth and beaten, on which they strew a train of rice or other grain, and retire to conceal themselves behind a bush where the drag-cord is brought. When the flocks of Red-Wings pass over the spot, they quickly descry the bait, light, and are caught in an instant. It is necessary to dispatch them, it being impossible to collect so many alive."

But they are destroyed chiefly as being pernicious birds, for though they sometimes grow very fat, their flesh is always indifferent eating; another point of resemblance to the Stares of Europe.

I have seen at Abbé Aubri's a variety of this species, in which the head and the upper part of the neck was of a light fulvous colour. The rest of its plumage was the same as usual. This first variety seems to shew that the bird represented in the *Planches Enluminées*, No. 343, by the name of *Cayenne Carouge*, is a second, which differs from the first in wanting the red spots on the wings only; for the rest of its plumage is exactly the same; the size is nearly alike, and the same proportions take place; and the difference between the climates is not so great, but

that we may suppose a bird could be equally reconciled to both.

We need only compare No. 402, and Fig. 2, No. 236, of the *Planches Enluminees*, to be convinced that the bird engraved in the latter under the name of *Cayenne Troupiale*, is only a second variety of the species of No. 402, under the name of *Red-winged Troupiales of Louisiana*, which is the subject of the present article. It is nearly the same in size, shape, and in the kind and distribution of the colours; except that in No. 236, the red tinges not only the anterior part of the wings, but is spread over the throat, the origin of the neck, a portion of the belly, and even the iris.

If we next compare this bird, No. 236, with the one represented, No. 536, under the name of *Guiana Troupiale*, we shall perceive that the latter is a variety of the former, arising from the difference of age or sex. All the colours are fainter; the red feathers are edged with white, and the black or blackish with light gray; so that the figure of each feather is distinctly marked, and the bird looks as if it were covered with scales. But the distribution of the colours is the same, the bulk the same, the climate the same, &c. It is impossible to discover so many relations subsisting between birds of different species.

I am

I am informed that these frequent the Savannas, in the island of Cayenne, and commonly lodge in the bushes, and that some people give them the name of *Cardinal* *.

* Specific character of the *Oriolus Phæniceus*:—"It is black, the coverts of the wings fulvous." In North America it is sometimes called the *Swamp Black-Bird*. They appear in New-York about April, and retire in October to the South. In some of the colonies a premium of three-pence the dozen was offered for destroying them; and several farmers had the precaution to steep their Indian corn in a decoction of white hellebore before they sowed it. Their nest is suspended among the bushes and reeds in sequestered swamps; it is strong, covered externally with plastered broad grass, and lined thickly with bent. The eggs are white, with scattered black streaks.

M

The BLACK TROUPIALE.

Oriolus Niger, Gmel.

Icterus Niger, Briss.

Cornix parva profunde nigra, Klein.

The Black Oriole, Penn. and Lath.

The dark colour of this bird has procured it the names of Crow, Blackbird, and Daw.— But this is not so deep nor so uniform as has been alleged; the plumage in certain positions is of a black, changing with greenish reflexions, especially, on the head, the upper part of the body, the tail, and the wings.

It is of the size of a Blackbird, being ten inches long, and fifteen or sixteen across the

194. THE LITTLE BLACK TROUPIALE.

wings, which when closed reach to the middle of the tail; this is four inches and a half in length, tapered, and consisting of twelve quills. The bill is more than an inch, and the mid-toe is longer than the leg, or rather the *tarfus*.

This bird is settled in St. Domingo, and is very common in some parts of Jamaica, particularly between Spanish-town and Passage-fort. Its stomach is muscular, and generally contains caterpillars and other insects*.

* The specific character of the *Oriolus Niger* is, "That it is entirely black." It inhabits also the whole extent of North America. They arrive at Hudson's Bay in June, and sing sweetly till their incubation, during which they only make a sort of chucking. They build their nests with grass and moss, on trees at the height of eight feet. Their eggs are five in number, dusky, and spotted with black. After hatching, they resume their warble; and collect in vast flocks to retire in September.

M

The Little BLACK TROUPIALE.

Oriolus Minor, Gmel.
The Lesser Black Oriole, Lath.

I have seen another Black Troupiale from America, but much smaller, and even inferior to the Red-wing Thrush in size: It was six or seven inches long, and its tail, which was square, only two inches and a half, and extended an inch beyond the wings.

The

The plumage was entirely black, but more glossy and floating with bluish reflexions on the head and the contiguous parts. It is said that this bird can be easily tamed, and taught to live familiarly in the house.

The bird of No. 606, *Planches Enluminees*, is probably the female of this; for it is entirely of a black or blackish colour, except the head and the tail, which are of a lighter tint, as is commonly the case in females. We also perceive the bluish reflexions which were remarked in the plumage of the male; but these appear not on the feathers of the head, but on those of the tail and the wings.

No naturalist has, I apprehend, taken notice of this species*.

* Specific character of the *Oriolus Minor* :—" It is black, the dark colour of the head mingled with cœrulean."

M

The BLACK-CAPPED TROUPIALE.

Le Troupiale a Calotte Noire, Buff.

Oriolus Mexicanus, Gmel.

The Black-crowned Oriole, Lath.

This bird appears to be entirely the same species with Brisson's Brown Troupiale of New Spain. To form an idea of its plumage,

imagine a bird of a fine yellow, with a black cap and mantle. The tail is of the same colour, and spotless; but the black on the wings is somewhat interrupted by the white which borders the coverts, and again appears on the tips of the quills. Its bill is of a light-gray, with an orange tinge, and the legs are chestnut.—It is found in Mexico, and in the island of Cayenne*.

* Specific character of the *Oriolus Mexicanus*:—"It is blackish, the upper side and the head yellow."

M

The SPOTTED TROUPIALE of Cayenne.

Oriolus Melancholicus, Linn. and Gmel.

Anthornus Nævius, Briss.

The Schomburger, Edw. and Lath.

The spots which occur in this small Troupiale are owing to this circumstance, that almost all the feathers, which are brown or blackish in the middle, are edged with yellow, more or less inclined to orange on the wings, the tail, and the lower part of the body. The throat is of a pure white; a streak of the same colour which passes close under the eye stretches back between two parallel black streaks, one of which accompanies the white above, and the other bends round the eye below; the iris is of
a bright

a bright orange, almost red :—All these give a lively appearance to the male ; for though the iris is orange also in the female, its plumage is of a tarnished yellow, which, mingling with a pale white, produces an unpleasant uniformity.

The bill is thick and pointed, as in the Troupiales, and cinereous ; the legs are flesh-coloured. Its proportion may be conceived from the figure.

The spotted Carouge of Brisson, which in many respects resembles the Troupiale of this article, differs from it in several important circumstances. It is not half the size, its hind nail is longer, its iris is hazel, its bill flesh-coloured, its throat, and the sides of its neck, black ; and lastly, the belly, the legs above and below the tail are without a single spot.

Edwards hesitated to which of two species he should refer it ; to the Thrush, or to the Ortolan. Klein decides very readily, that it belongs to neither, but to the Chaffinch ; yet notwithstanding his decision, the shape of its bill, and the identity of the climate, determine me to adopt the opinion of Brisson, who makes it a Carouge*.

* Specific character of the *Oriolus Melancholicus* :—“ It is gray, dotted with black, with a white stripe on the eyes.” Latham considers the Spotted Troupiale as a variety of this bird.

The OLIVE TROUPIALE of Cayenne.

Oriolus Olivaceus, Gmel.

The Cayenne Olive Oriole, Lath.

This bird is only six, or seven inches long. It owes its name to the olive colour which prevails on the hind part of its neck, its back, its tail, its belly, and the coverts of its wings. But this colour is not uniform; it is darker on the neck, the back, and the adjacent coverts of the wings, and somewhat less so on the tail; it is much lighter under the tail, and also on a great part of the coverts of the wings, which are furthest from the back; with this difference between the large and the small sort, that the latter have no mixture of colour, while the former are variegated with brown. The head, the throat, the fore-part of the neck and the breast, are of a glossy brown, deeper under the throat, and inclining to orange on the breast, and running into the olive colour of the lower part of the body. The bill and legs are black; the wing-quills, and the large coverts nearest the outer edge, are of the same colour, but bordered with white.

The

The shape of its bill is the same as that of the other Troupiales; its tail is long, and its wings when closed do not reach the third of the length *.

* Specific character of the *Oriolus Olivaceus*:—"It is olive, the head, throat, and breast dusky, the wings black."

M

The WEAVER ORIOLE.

Le Cap-More †, Buff.

Oriolus Textor, Gmel.

The two birds figured No. 375 and 376, *Pl. Enl.* were brought by the captain of a ship who had collected forty birds from different countries, Senegal, Madagascar, &c. and who had called them Senegal Chaffinches. They have been termed Senegal Troupiales; but that appellation seems very improper; for the climate is different from that of the Troupiales, and the Weaver is widely distinguished by the proportions of its bill, tail, and wings, and the manner in which it builds its nest. It is perhaps the African representative of the American species. The two which we have mentioned belonged to a lady of high rank, who al-

† The name *Cap-more* is contracted for *Capuchon-mordoré*, which denotes its *cowl of a dusky golden gloss*.

lowed them to be designed at her house, and has obligingly communicated some particulars that occurred with regard to the way in which they conducted themselves. This is the only source of information which we have.

The eldest had a kind of cowl which appeared of a brown-gold gloss in the sun ; this cowl disappeared in the moulting during the autumn, leaving the head of a yellow colour ; but it again returned in the spring, and was constantly renewed the succeeding years. The chief colour of the rest of the body was yellow, more or less inclined to orange ; this was the predominant colour on the back, and on the lower part of the body ; it bordered the coverts of the wings, their quills, and those of the tail, which were all of a blackish ground.

The young one had no cowl till the end of the second year, and did not even change its colours before that time ; which occasioned its being mistaken for a female, and designed as such, No. 376. This mistake was excusable, since the distinction of sexes is not apparent during infancy, and one of the principal characters of the females is that of preserving long the marks of youth.

Before the change which took place in the colours of its plumage, the yellow was of a lighter tint than in the old one ; it spread over the throat, the neck, the breast, and bordered, as in the other, all the quills of the tail and of
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the wings. The back was of an olive-brown, which extended beyond the neck as far as the head. In both the iris was orange, the bill of a horn colour, thicker and shorter than in the Troupiale, and the legs reddish.

These two birds lived in the same cage, and at first upon good terms with each other; the young one sat generally on the highest bar, holding its bill close to the other, which it answered, by clapping its wings, and with a submissive air.

They were observed in the spring to interweave chickweed in the grating of their cage; this was therefore conceived as an indication of their desire to nestle. They were supplied with small rushes, and they built a nest so capacious as to conceal one of them entirely. The following year they renewed their labour; but the young one being new clothed in the plumage of its sex, was driven off by the other, and obliged to conduct its work alone in another corner of the cage. But it was still persecuted, and notwithstanding its submissive behaviour, it was often so roughly treated as to be left insensible. They were separated, and each was intent on building; but the labours of one day were often destroyed in the succeeding—A nest is not the production of an individual.

They had both a singular kind of song, somewhat shrill, but very sprightly. The old one died suddenly, and the young one was cut off by

by epileptic fits. Their size was rather inferior to that of our first Troupiale; and their wings and tail were also proportionably shorter*.

* Specific character of the *Oriolus Texor*:—"It is yellow; its head dusky, glistening with gold; the quills of its wings and tail blackish, and orange at their margin."

M

The WHISTLER.

Oriolus Viridis, Gmel.

Icterus minus Viridis, Briss.

The Whistler Oriole, Lath.

I see no reason why Brisson has reckoned this bird a Baltimore, for both in the shape of its bill and in the proportions of its tarsus it seems more related to the Troupiales. But I leave the matter undecided, placing it between the Troupiales and Baltimores, and applying the vulgar name which it receives in St. Domingo, on account of its shrill notes.

This bird is in general brown above, except the rump, and the small coverts of the wings, which are of a greenish yellow, as also in the whole under-part of the body; but this colour is dusky below the throat, and variegated with rusty on the neck and breast; the great coverts and the quills of the wings, as well as the twelve of the tail, are edged with yellow. But to form
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an accurate idea of the plumage of the Whistler, we must imagine an olive tint of various intensity spread over all the colours without exception. To characterize the predominant colour of the plumage of this bird, therefore, we ought to take olive and not green, as Brisson has done.

The Whistler is of the size of a Chaffinch; it is about seven inches long, and ten or twelve inches across the wings; the tail, which is unequally tapered, is three inches in length, and the bill nine or ten lines.

M

The BALTIMORE.

Oriolus Baltimore, Linn. and Gmel.

Icterus Minor, Briss.

Icterus ex auro nigroque varius, Klein.

The Baltimore Bird, Catesby, Penn. and Lath.

This bird owes its name to some resemblance that is perceived between the nature and distribution of the colours of its plumage, and the arms of Lord Baltimore*. It is a small bird of the size of a house Sparrow, and weighing little more than an ounce; its length is six or seven inches, its alar extent eleven or twelve, its tail composed of twelve quills, and two or three

* Lord Baltimore was a Roman Catholic nobleman, who obtained the grant of Maryland, which he planted. T.

inches

inches long, stretching more than a half beyond the wings when closed. A sort of cowl of a fine black covers the head, and descends before upon the throat, and behind as far as the shoulders: the great coverts and the quills of the wings are also black, like those of the tail; but the former are edged with white, and the latter tipped with orange, which is the broader the farther they are from the mid-ones, in which it is wanting. The rest of the plumage is of a beautiful orange; and lastly, the bill and legs are of a lead colour.

In the female, which I examined in the Royal Cabinet, all the fore-part was of a fine black, as in the male, the tail of the same colour, the great coverts and the wing-quills blackish, the whole without any mixture of other colour; and what was so beautiful an orange in the male, was only a dirty red in the female.

I have already said, that the bill of the Baltimores was not only proportionably shorter and straighter than in the Carouges, the Troupiales, and the Cassiques, but of a peculiar shape: It is a pyramid of five sides, two belonging to the upper mandible, and three to the lower. I shall add, that its leg, or rather its tarsus, is more slender than in the Carouges and Troupiales.

The Baltimores disappear in the winter, at least in Virginia and Maryland, where Catesby observed them. They are also found in Canada, but Catesby met with none in Carolina.

They

They build their nests on large trees, such as the poplars, the tulip trees *, &c. They fix it to the end of a thick branch, and commonly support it by two small shoots which enter its sides; in which circumstance the nests of the Baltimores seem to resemble those of the Loriot †.

* The tulip tree, *Liriodendron-Tulipifera*, LINN, is peculiar to America, and so called, because its flower-cup resembles a tulip in size and shape, and has somewhat of the same tints. T.

† Specific character of the *Oriolus Baltimore* :—" It is blackish, the under-part of its body, and a stripe on its wings, fulvous." The nest is curiously woven of tough filaments of plants, intermixed with wool, and lined with hair. It is pear-shaped, open at top, with a hole in the side, by which the young are fed and void their excrements. In some parts of North America it is called, on account of its brilliancy, the *Fierj bang-nest*.

M

The BASTARD BALTIMORE.

Oriolus Spurius, Gmel.

Icterus Minor Spurius, Briss.

Tardus Minor gutture nigro, Klein.

This bird was no doubt so called because the colours of its plumage are not so lively as in the Baltimore, and for this reason it may be considered as a degraded race. In fact, when we compare these birds, and find an exact correspondence in every thing, except in the colours, and not even in the distribution of these, but only in the different tints which they assume;

we

we cannot hesitate to infer that the Bastard Baltimore is a variety of a more generous race, degenerated by the influence of climate, or some other accidental cause. The black on the head is somewhat mottled, that of the throat pure; that part of the hood which falls behind is of an olive gray, which becomes darker as it approaches the back. Whatever in the preceding was bright orange, is in the present yellow, bordering on orange, and more vivid on the breast and the coverts of the tail than on any other place. The wings are brown, but their great coverts and their quills are of a dirty white. Of the twelve tail quills, the two central ones are blackish near their middle, olive at their origin, and yellow at their extremity; the next one on either side shews the two first colours mixed confusedly; and in the four following quills, the two last colours are melted together. In a word, the true Baltimore bears the same relation to the bastard one in respect to the colours of the plumage, that the latter bears to its female; in which the upper-part of the body is of a dusky white, and the under of a yellowish white. [A]

[A] Specific character of the *Oriolus Spurius*:—"It is black, fulvous below, with a white stripe on the wings." In the State of New-York it usually arrives in May; attaches its nest to an apple-tree, and lays five eggs.

The YELLOW CASSIQUE of Brazil, or, the YAPOU.

Oriolus Perfcus, Linn. and Gmel.

Cassicus Luteus, Briss.

The Black and Yellow Oriole, Lath. *

When we compare the Cassiques with the Troupiales, the Carouges, and the Baltimores, all which have many common properties, we perceive that they are larger, that their bill is stronger, and their legs proportionably shorter; not to mention the difference in the general appearance which it would be difficult to describe.

Several authors have given figures and descriptions of the Yellow Cassique under different names, and scarcely two of these exactly correspond.—But before we proceed to consider the varieties in detail, it will be proper to separate a bird, the characters of which seem to be widely distant from those of the Yellow Cassique of Brazil: It is the Persian Magpie of Aldrovandus. That naturalist describes it merely from a drawing, which had been sent from Venice. He reckons it to be of the size of our Magpie. Its predominant colour is not black,

* In Latin it has also been called *Pica*, *Picus Minor*, *Cissa*, *Nigra*, &c.; in Italian, *Gazza*, or, *Zalla di Terra Nuova*; in English, *The Black and White Daw of Brazil*.

but only dusky (*subfuscum*): Its bill is very thick, somewhat short (*breviusculum*) and whitish; its eyes white, and its nails small; whereas the Yapou is scarcely larger than a Blackbird, and the dark part of its plumage is jet black; its bill is pretty long, of the colour of sulphur; its iris is like sapphire, and its nails of considerable strength, according to Edwards, and even very strong and hooked, according to Belon. We cannot doubt that birds so distinct belong to different species; especially if Aldrovandus's information be true, that his bird is a native of Persia, for we are certain that the Yapou is American.

The principal colours of the Yapou are constantly black and yellow, but the distribution is not uniformly the same, and varies in different individuals.—The one, for instance, which we have caused to be designed is entirely black, except the bill and the iris, as we have said, and the great coverts of the wings nearest the body, which are yellow, as also all the hind-part of the body, both above and below, from the thighs inclusively as far as the middle of the tail, and even beyond it.—In another, which was brought from Cayenne and lodged in the Royal Cabinet, and which is larger than the preceding, there is less yellow on the wings, and none at all on the lower part of the thigh, and the legs appear proportionably stronger:—it is probably a male.—In the Black and White Pye of Edwards, which
is

is evidently the same bird with ours, there is on four or five of the yellow coverts of the wings a black spot near their extremity; and besides this, the black has purple reflexions, and the bird is rather larger.—In the Yapou or Jupujuba of Marcgrave, the tail is mottled with black and white only below, for its upper surface is entirely black, except the outmost feather on each side, which is yellow half its length.

It follows, therefore, that the colours of the plumage are by no means fixed and invariable in this species, which inclines me to believe with Marcgrave *, that the bird which Brisson calls *the Red Cassique*, is only a variety of the same.—I shall afterwards state my reasons †.

* I saw some entirely black, having the back of a blood colour.
MARCGRABE.

† Specific character of the *Oriolus Perficus*:—"It is black, the hind-part of its back, and a spot on the coverts of the wings, and at the base of the coverts, yellow."

M

VARIETY of the YAPOU.

I.

The RED CASSIQUE of Brazil,
or, the JUPUBA.

Oriolus Perficus, var. 1. Gmel.

This is one of the names which Marcgrave gives to the Yapou, and which I apply to the

Red Cassique of Brisson, because it resembles that bird in the essential points; the same proportions, the same size, the same aspect, the same bill, the same legs, and the same deep black diffused through most of its plumage. It is true, that the lower part of the back is red, instead of yellow, and the under surface of the body and of the tail entirely black; but this cannot be considered as a material distinction in a bird whose plumage, we have already observed, is subject to considerable variations. Besides, yellow and red are contiguous colours, and apt to melt into orange; a circumstance which may be occasioned by difference of age, of sex, of climate, or of season.

These birds are about twelve inches long, and seventeen across the wings; the tail is forked and bluish; the two mandibles are equally arched downwards; the first *phalanx* of the outer toe in each foot seems to grow into the mid-toe; the tail consists of twelve quills, and the under surface is white both below the black and the yellow part of the plumage.

They construct their nests with grass, interwoven with horse hair and hogs bristles, or with vegetable productions which supply their place, and they imitate the form of a cucurbit fitted to its alembic. The nests are brown on the outside, and about eighteen inches deep, though the interior cavity is only a foot; the upper part is thick and prominent for the space of half a foot; and here they are suspended from the extremities

ties of small branches. Sometimes four hundred of these nests have been seen at once hanging in a single tree, of the kind which the Brazilians call *Uti*; and as the Yapous hatch thrice a-year, the multiplication must be prodigious. This instinct of nestling in society on the same tree, marks some analogy to our Daws*.

* Linnæus and Gmelin consider the bird described in this article as different from the *Jupujuba* of Marcgrave, and form it into a new species under the name of *Oriolus Hæmorrhous*, the *Red-rumped Oriole* of Latham. Its specific character, "Black, with a scarlet rump."

M

II.

The GREEN CASSIQUE of Cayenne.

Oriolus Cristatus, var. 2. Gmel.

I shall not here be obliged to compare or discuss the relations of other authors; for none has taken notice of this bird. Nor can I produce any information respecting its dispositions and instincts. It is larger than the preceding; its bill is thicker at the base, and longer; and its legs, though still as short, would appear to be stronger. It has been very properly named the Green Cassique, for all the fore-part both above and below, and even the coverts of the wings, are of that colour; the hind-part is chesnut; the wing-quills are black, and those of the tail partly black,

black, partly yellow ; the legs are entirely black, and the bill is all red.

The length of this Cassique is fourteen inches, and its alar extent eighteen or nineteen.

III.

The CRESTED CASSIQUE of Cayenne.

Oriolus Cristatus, Gmel.

Anthornus Maximus, Pallas.

The Crested Oriole, Lath.

This is also a new species, and the largest with which we are acquainted. Its bill is proportionably longer and firmer than in the others, but its wings are shorter. Its extreme length is eighteen inches, its tail five, and its bill two. It is also distinguished from the preceding, by small feathers, which it bristles at pleasure on the top of its head, and which form a sort of moveable crest. All the fore-part of this Cassique, both above and below, including the wings and the legs, is black, and the whole of the rest of a deep chestnut. In the tail, which is tapered, the two middle quills are black, like those of the wings, but all the lateral ones are yellow ; and the bill is of the same colour.

I have seen in the Royal Cabinet, a specimen which was rather of an inferior size, and in which the tail was entirely yellow ; but I am not

not certain whether the two mid-quills were plucked, for it had only eight quills in all *.

* Specific character of the *Oriolus Cristatus*:—"It is very black, its top somewhat crested by some elongated feathers."

IV.

The CASSIQUE of Louisiana.

Oriolus Ludovicianus, Gmel.

The White-headed Oriole, Penn. and Lath.

White, and changing violet, sometimes mixed together, sometimes separated, are all the colours of this bird. Its head is white, and also its tail, belly, and rump; the feathers of the wings and of the tail are of a waving violet, and edged with white; the rest of the plumage is dyed with a mixture of these colours.

It is a new species, lately brought from Louisiana. We may add, that it is the smallest of the Cassiques known; its whole length is only ten inches, and its wings when closed reach only to the middle of the tail, which is somewhat tapered.

The C A R O U G E.

Oxiolus Bonana, Linn. and Gmel.

Xanthornus, Briss. *

Turdus Minor Varius, Klein.

The Bonana Bird, Brown and Lath.

In general the Bonanas are smaller, and have a slenderer bill in proportion than the Troupiales. The subject of this article has its plumage painted with three colours, applied in large bodies.—These are, 1. Reddish-brown, which is spread over all the fore-part of the bird, on the head, the neck, and the breast. 2. A velvet black on the back, the feathers of the tail, those of the wings, and their great coverts, and even on the bill and the legs. 3. Deep orange on the small coverts of the wings, the rump, and the coverts of the tail. All these colours are more obscure in the female.

The length of the Bonana is seven inches, that of its bill six lines, that of its tail above three inches; its wings when spread measure eleven inches, and when closed extend to the middle of the tail, or beyond it. This bird was brought from Martinico; that of Cayenne

* Brisson regards it as the same with the *Xochitot Altera* of Fernandez, already noticed. But its plumage is different, and though it inhabits the same country, it builds its nest differently.

(Fig.

(Fig. 1. No. 607, *Pl. Enl.*) is smaller, and the sort of cowl which covers its head, neck, &c. is black, sprinkled with some small white spots on the sides of the neck, and little reddish streaks on the back; and lastly, the great coverts and the middle feathers of the wings are edged with white. But these differences are, I conceive, too inconsiderable to prevent our supposing the Cayenne Bonana a variety of that of Martinico. They construct a curious kind of nest, resembling the quarter of a hollow globe; and sew it under the leaf of a Bonana, which shelters the nest, and forms a part of it; the rest consists of the fibres of the leaves.

In what has been said, it would be difficult to recognise the Spanish Nightingale of Sloane*; for that bird is in every respect smaller than the Bonana, being only six English inches in length, and nine across the wings; its plumage is different, and it constructs its nest in another mode. It is a sort of bag, suspended from the extremity of small branches by a thread which they spin out of a substance that they extract from a parasite plant, called *old man's beard*, which many have mistaken for horse-hair. In Sloane's bird the base of the bill was whitish, and encircled by a black ring; the crown of the head, the neck, the back, and the tail, were of a light

* Called also the *Watchy Picket* and *American Hang-nest*. It is the *Oriolus Nidipendulus* of Gmelin, and the *Hang-nest Oriole* of Latham.

brown, or rather reddish gray; the wings of a deeper brown, variegated with some white feathers, the lower part of the tail marked in its middle with a black line; the sides of the neck, the breast, and the belly, of the colour of a dead leaf.

Sloane mentions a variety, either from age or sex, which differs from the preceding, only because its back has more of the yellow tint, the breast and belly of a brighter yellow, and there is a greater share of black under the bill.

These birds haunt the woods, and have an agreeable song. They feed on insects and worms, for fragments of these are found in their gizzard or stomach, which is not muscular. Their liver is divided into a great number of lobes, and of a blackish colour.

I have seen a variety of the St. Domingo Carouges, or the Yellow Bottoms of Cayenne, which I proceed to consider: it resembled much the female Bonana of Martinico, except that its head and neck were blacker. This confirms my idea, that most of these species are related, and that notwithstanding our constant endeavour to reduce their number, we have still carried the subdivisions too far; especially with regard to foreign birds, with which we are so imperfectly acquainted*.

* Specific character of the *Oriolus Bonana*:—"It is fulvous, its head and breast chestnut, its back and the quills of its wings and tail, black."

The LESSER BONANA.

Le Petit Cul Jaune de Cayenné, Buff.

Oriolus Xanthornus, Linn. and Gmel.

Xanthornus Mexicanus, Briss. *

The male and female of this species are represented No. 5. fig. 1. and fig. 2. *Pl. Enl.* They have a jargon nearly like that of our Lorient, and shrill like that of our Magpie.

They suspend their nests, which are of a purse shape, from the extremity of small branches, like the Troupiales; but I am informed they choose the branches that are long and naked, and select the trees that are stunted and ill-formed, and lean over the course of a river. It is also said that these nests are subdivided into compartments for the separate families, which has not been observed in the Troupiales.

These birds are exceedingly crafty, and difficult to ensnare. They are nearly of the size of a Lark; their length eight inches, their alar extent twelve or thirteen, the tail three or four inches, and tapered, stretching more than half beyond the closed wings. The principal colours

* Brisson supposes it to be the same with the *Ayoquantototl* of Fernandez, which has indeed the same size, and its plumage composed of black, yellow, and white. But Fernandez says nothing of the distribution of these colours, nor furnishes any property characteristic of the species.

of those represented No. 5, are yellow and black. In fig. 1. the black is spread over the throat, the bill, and the space between that and the eye, the great coverts, and the quills of the wings, and of the tail, and the legs; all the rest is yellow. But we must observe, that the middle quills and the great coverts of the wings are edged with white, and the latter sometimes entirely white. In fig. 2. a part of the small coverts of the wings, the thighs, and the belly, as far as the tail, are yellow, and the rest all black*.

We may consider, as varieties of this species, 1. The Yellow-headed American Carouge, or Bonana, of Brisson. The crown of its head, the small coverts of its tail, those of the wings, and the lower part of the thigh, are yellow, the rest of the body entirely black or blackish: it is about eight inches long, twelve inches across the wings, the tail consisting of layers, containing twelve quills, each four inches long†. 2. The Bonana, or Carouge, of the island of St. Thomas, whose plumage is also black, except a little yellow spot on the small coverts of the wings: it has twelve quills in the tail, which is tapered, as in the Lesser Bonana, but somewhat longer. Edwards has designed one of the same species, Pl. 322,

* Specific character of the *Lesser Bonana Bird*:—"It is yellow; the upper part of its throat, its tail, and wing-quills, black."

† *Oridulus Chrysocephalus*, Linn. and Gmel. *Xanthornus Ixorocephalus Americanus*, Brisson. *The Golden-headed Oriole*, Lath. which

which has a remarkable depression at the base of the upper mandible *. 3. The Jamac of Marcgrave, which differs very little from it with respect to size, and of which the colours are the same, and distributed nearly in the same way as in fig. 1. except that the head is black, that the white on the wings is collected in a single spot, and that a black line extends across the back from the one wing to the other †.

* *Oriolus Cayanensis*, Linn. and Gmel. *Xanthornus Cayanensis*, Briss. *The Yellow-winged Pye*, Edw. *The Yellow-winged Oriole*, Lath.

† *Oriolus Jamacaii*, Gmel. *The Brazilian Oriole*, Lath.

M

The YELLOW-HEADED ORIOLE.

Les Coiffes Jaunes, Buff.

Oriolus Icterocephalus, Linn. and Gmel.

Xanthornus Icterocephalus Cayanensis, Briss.

The Yellow-headed Starling, Edw.

These are Cayenne Bonanas, which have a black plumage, and a sort of cap that covers the head and part of the neck, but descends lower before than behind. A black streak, which stretches from the nostrils to the eyes, and turns round the bill, has been omitted in the figure. The subject represented Pl. 343, appears to be considerably larger than another which I have seen in the Royal Cabinet. Must this be ascribed to

to the difference of age, of sex, of climate, or to the defect of the preparation? But from that variety Briffon has drawn his description: its size is equal to that of the Brambling; it is about seven inches long, and eleven across the wings.

M

The OLIVE CAROUGE of Louisiana.

Oriolus Capensis, Gmel.

Xanthornus Capitis Bonæ Spei, Briff.

The Olive Oriole, Lath.

This bird is represented *Pl. Enl.* No. 607, Fig. 2, under the name of the Carouge (Bonana) of the Cape of Good Hope. I had long suspected that this bird, though brought from the Cape to Europe, was really not a native of Africa; and the point is decided by the late arrival (October 1773) of a Bonana from Louisiana, which is evidently of the same species, and differs in nothing but in the colour of the throat, which in the latter is black, and orange in the former. I am convinced that we ought to entertain the same opinion of all the pretended Bonanas and Troupiales of the ancient continent; and that we shall discover sooner or later that they are either of a different species, or have derived their origin from America.

The

The Olive Bonana of Louisiana has much of the olive tinge in its plumage, especially on the upper part of the body; but this colour is not uniform; it is tinged with gray on the crown of the head, and with brown behind the neck, on the back, the shoulders, the wings, and the tail; with a light-brown on the rump and the origin of the tail; and with yellow on the flanks and the thighs, and the large coverts and quills of the wings, whose fundamental colour is brown, are edged with yellow. All the under-part of the body is yellow, except the throat, which is orange; the bill and the legs are of a cinereous brown.

This bird is nearly of the size of a house sparrow; its length six or seven inches, its alar extent ten or eleven inches. The bill is near an inch long, and the tail more than two; it is square, and consists of twelve quills. The first quill is the shortest of the wing, and the third and fourth the longest*.

* Specific character of the *Olive Oriole*:—"It is of a dusky olive, below yellow."

The K I N K.

Oriolus Sinensis, Gmel.

The Kink Oriole, Lath.

This new species, brought very lately from China, appears to resemble so much the Bonana on the one hand, and the Blackbird on the other, that it may be regarded as the intermediate shade. The sides of its bill are compressed as in the Blackbird, but not scalloped like those of the Bonana; and Daubenton the younger has properly given it a distinct name, as being really different from these two species, though it connects the common chain.

The Kink is smaller than our Blackbird: its head, its neck, origin of its back, and its breast, are of ash-gray, and this colour acquires a deeper hue as it approaches the back; the rest of the body, both above and below, is white, as also the coverts of the wings, whose quills are of a polished steel-colour, glistening with reflexions that play between greenish and violet. The tail is short, tapered, and parted by this same steel colour and white; so that on the two mid-quills, the white is only a small spot at their extremity; this white spot extends higher on the following quills, the farther they remove from the middle, and the steel colour retiring, is at last reduced on the two exterior quills to a small spot near their origin.

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THE GOLDEN ORIOLE .

The L O R I O T*.

Oriolus Galbula, Linn. and Gmel.

Oriolus, Briss.

Galbula, Ray, and Will.

Turdus Luteus, Frisch.

Turdus Aureus, Klein.

The Witwall, Will.

The Yellow-bird from Bengal, Alb.

The Golden Oriole, Penn. and Lath.

IT has been said, that the young of this bird are excluded by degrees, and in detached parts, and that the first object of the parents is to collect and combine the scattered limbs, and, by virtue of a certain herb, to form them into an animated whole. The difficulty of this marvellous re-union hardly exceeds, perhaps, that of properly separating the ancient names which the moderns have confusedly applied to this species,

* In Greek, *Χλωριον*, from its greenish yellow colour; the female *Χλωρις*, according to *Ælian*; in modern Greek, *Συκοφαγος*, or fig-eater: In Latin it has also the names *Chlorion* and *Chloris*, besides *Chlorens*, *Oriolus*; *Merula Aurea*, *Turdus Aureus*, *Luteus*, *Lutea*, *Luteolus*, *Ales Luridus*, *Picus nidum suspendens*, *Avis Icterus*, *Galgulus*; and *Pliny* applies these four names, *Galbulus*, *Galbula*, *Vireo*, *Vireo*: in Italian, *Oriolo*, *Regalbullo*, *Gualbedro*, *Galbero*, *Reigalbero*, *Garbella*, *Rigeyo*, *Melxiozallo*, *Becquafigo*, *Brusola*: in Spanish, *Oropendula*, *Oroyendola*: in German, *Bierholdt*, *Bierolf*, *Brouder-Berolf*; *Byrolt*, *Tyrolt*, *Kirschholdt*, *Gerolf*, *Kerserife*, *Goldamjel*, *Goldmerle*, *Gut-merle*, *Olimerle*, *Gelbling*, *Widdewal*, *Witwal*: in Swift, *Witterwalch*. The name *Oriole* is derived from the Latin *Aureolus*, or Golden.

retaining those which really belong to it, and referring the others to those kinds which the ancients intended them to denote. I shall here observe only that, though this bird is dispersed through a wide extent, there are certain countries which it seems to avoid. It is not found in Sweden, in England, in the Bugey mountains, nor in the heights of Nantua, though it appears in Switzerland regularly twice a year. Belon says that he never saw it in Greece; and how can we suppose that Aristotle knew this bird, without being acquainted with the singular construction of its nest, or if he knew it, that he should have omitted to take notice of it?

Pliny speaks of the *Chlorion* *, from the account of Aristotle; but is not always attentive to compare the information which he borrows from the Greeks, with what he draws from other sources. He has mentioned the Lorient by four different terms †, without acquainting us, whether it is the same bird with the *Chlorion*.

The

* Hist. Nat. lib. x. 29.

† “ *Picorum* aliquis suspendit in furculo (nidum) primis in ramis, cyathi modo.” Lib. x. 33. “ Jam publicum quidem omnium est (*galgulus*) tabulata ramorum sustinendo nido providere eligere, camerâque ab imbri aut fronde protegere densâ.”—From this similarity in the construction of the nest, we may conclude that the *Picus* and *Galgulus* are the same with the Lorient. That the *Galgulus* is still the same with the *Avis Isterus* and the *Ales Luridus* appears from the two following passages: “ *Avis iſterus* vocatur a colore, quæ si spectetur, sanari id malum (regium) tradunt, et avem mori; hanc puto Latine vocari *galgulum*.” Lib. xxx. 11.
“ Iſterias

The Lorient is a roving bird, continually changing its abode; it lives with us only during the season of love. It obeys the primary impulses with ardour and fidelity. The union is formed on the arrival, about the middle of the spring. The pair build their nest on lofty trees, but often at no considerable height; they form it with singular industry, and in a way very different from that of the Blackbird, though they have been referred to the same genus. They commonly fasten to the fork of a small branch long straws or hemp-stalks; some of which, extending directly across, form the margin of the nest; others penetrate through its texture; while others, bending under it, give solidity to the structure. The nest is thus provided with an exterior cover, and the inner bed, prepared for receiving the eggs, is a matting of the small stems of dog-grass, the beards of which are so much concealed that the nest has often been supposed to be lined with the roots of plants. The interstices between the outer and inner case are filled with moss, lichens, and other such substances, which compact the whole. After the nest is constructed, the female drops in it four or five eggs, the ground colour of which is a dirty white, and sprinkled with small dis-

"*Icteria (lapis) aliti lurido similis, ideo existimatur salubris contra regios morbos.*" *Lib. xxxvii. 10.* Besides, in Book x. 23. Pliny says of the *Galgulus*, that "it retires as soon as it has reared its young," which agrees exactly with the Golden Oriole.

tinged spots of a brown, approaching to black, most numerous on the small end. She sits closely three weeks, and not only retains long her affection * to her young, but defends them against their enemies, and even against man, with more intrepidity than could be expected from so small a bird. The parents have been seen to dart resolutely upon the plunderers of their brood; and what is still more remarkable, a mother, taken with her nest, continued to hatch in the cage, and expired on her eggs.

After the young are reared, the family prepares for its journey. This commonly happens in the end of August, or the beginning of September. They never assemble in numerous flocks, nor do the families remain united, for seldom are more than two or three found together. Though they fly rather heavily, flapping their wings like the Blackbird, they probably winter in Africa: for on the one hand, the Chevalier des Mazy, Commander of the Order of Malta, assures me, that they pass that island in the month of September, and repass it in the spring; and on the other, Thevenot says, that they migrate into Egypt in the month of May, and return in September †. He adds, that in May they are very fat, and their flesh good eating. Aldrovandus is surprised that in France they are never brought to our tables.

* BELON.

† Voyage du Levant, tom. i. p. 493.

The Lorient is about as large as the Blackbird ; its length nine or ten inches, its alar extent sixteen, its tail three and a half long, and its bill fourteen lines. The male is of a fine yellow over all the body, the neck, and head, except a black streak which stretches from the eye to the corner of the aperture of the bill. The wings are black, except a few yellow spots, which terminate most of the great quills, and some of the coverts : the tail is divided by yellow and black, so that the black prevails on the part which appears of the two mid-quills, and the yellow gradually extends over the lateral quills, beginning at the tips of those which are next the two middle ones. But the plumage is very different in the two sexes. Almost all that was of a pure black in the male, is, in the female, of a brown, with a greenish tinge ; and what was of a beautiful yellow in the former, is in the latter olive and pale brown :—olive on the head, and the upper part of the body dirty white, variegated with brown streaks under the body, white at the tips of most of the wing-quills, and pale yellow at the extremity of their coverts ; and there is no pure yellow, except at the end of the tail and on the lower coverts. I have besides observed in a female, a small space behind the ear, without feathers, and of a light slate colour.

The young males resemble the females with respect to plumage, and the more so the tenderer their age. At first they are still more speckled

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than the female, and even on the upper part of the body; but in the month of August the yellow begins to appear under the body. Their cry is different also from that of the old ones; they scream *yo, yo, yo*, succeeded sometimes with a sort of mewing like that of a cat *. But they have also a sort of whistling, especially before rain †; if this be not really the same with the mewing.

Their iris is red, the bill reddish brown, the inside of the bill reddish, the edges of the lower mandible somewhat arched lengthwise, the tongue forked, and, as it were, jagged at the tip, the gizzard muscular, terminating in a bag formed by the dilatation of the *œsophagus*, the gall bladder green, the *cæca* very small and short, and the first *phalanx* of the outer toe glued to that of the middle toe.

When they arrive in the spring, they feed on caterpillars, worms, insects, whatever in short they can catch; but they are fondest of cherries, figs ‡, the berries of the service tree, peas, &c. A couple of these birds could in one day completely plunder a rich cherry-tree; for they peck

* Gesner says, that they pronounce *Oriot*, or *Loriot*; Belon, that they seem to say *compere loriot*; and others have fancied that they articulated *loufot bonnes merises*, &c.

† GESNER.

‡ Hence they have been called *Συκοφαγοί*, and *Becafigs*. Perhaps the figs improve the quality of their flesh; they do so in the case of Blackbirds.

the cherries one after another, and only eat the ripe part.

The LORIOTS are not easy to breed or tame. They can be caught by the call, placing limed twigs where they drink, and by various sorts of nets.

These birds have sometimes spread from one end of the continent to another, without suffering any alteration in their external form, or in their plumage; for LORIOTS have been seen in Bengal, and even in China, which were precisely like ours. But others have been brought from nearly the same countries, which had some differences in their colours, and which may be regarded, for the most part, as varieties of climate, till accurate observations, of their instincts, their habits, and manner of life, throw light on our conjectures*.

* Specific character of the *Golden Oriole*:—"It is yellow, its straps and joints are black, its outer tail-quills yellow behind." It seldom or never visits England.

VARIETIES of the LORIOT.

I.

The COULAVAN.

Oriolus Chinenfis, Linn. and Gmel.*Oriolus Cochjnenfis*, Briss.

This bird is brought from Cochin-China : it is perhaps rather larger than our Lorient, its bill is also proportionably stronger ; the colours of the plumage are precisely the same, and every where distributed in a similar manner, except on the coverts of the wings, which are entirely yellow, and on the head, where there is a sort of black horse-shoe, of which the convex part bounds the occiput, and its branches, passing below the eye, terminate in the corners of the opening of the bill. This is the most remarkable distinction of the Coulavan, and yet there is in the Lorient a black spot between the eye and the bill, which appears to be the rudiment of the horse-shoe.

I have seen some specimens of the Coulavan, in which the upper part of the body was of a brown yellow. In all, the bill is yellowish, and the legs black *.

* Specific character of the *Oriolus Chinenfis*.:—" It is yellow, the joints black, but yellow at the tips, a black stripe on the back of the head." Latham reckons it a variety.

II.

The CHINESE LORIENT.

Oriolus Melanocephalus, Gmel.*Sturnus Luteolus*, Linn.*Oriolus Bengalenjis*, Briss.*The Black-headed Indian Icterus*, Edw.

It is somewhat less than ours, but is of the same shape, proportions, and colours, though these are differently disposed. The head, the throat, and the fore-part of the neck, are entirely black*, and in the tail there is no black, but a broad stripe, which crosses the two intermediate quills near their extremity, and two spots placed very near the tips of the two following quills. Most of the coverts of the wings are yellow, the others are parted with black and yellow; the largest quills are black where they are seen when the wings are closed, and the others are edged or tipped with yellow; all the rest of the plumage is of the finest yellow.

The female is different†; for the front of the space between the eye and the bill is of a vivid yellow, the throat and the fore-part of the

* The sort of black piece that covers the throat and the fore-side of the neck, is in Edwards' figure a scallop on each near its middle.

† *Oriolus Galbula*, var. 1. Gmel. *Icterus Maderaspatanus* Naevius, Briss. *The Mottled Jay*, Ray. *The Yellow Starling from Bengal*, Alb. *The Yellow Indian Starling*, Edw.

neck of a light yellowish cast, with brown speckles; the rest of the under-part of the body is of a deeper yellow, the upper of a shining yellow, all the wings variegated with brown and yellow, the tail also yellow, except the two mid-quills, which are brown, marked with a yellowish spangle, and tip with yellow.

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III.

The INDIAN LORIOT.

Oriolus Galbula, var. 2. Gmel.

Oriolus Indicus, Briss.

Chloris Indicus, Aldr.

It has more yellow than any of the Loriot, for it is entirely of that colour, except, 1. A horse-shoe, which bends round the crown of the head, and terminates on each side in the corners of the bill. 2. Some longitudinal spots on the coverts of the wings. 3. A belt which crosses the tail near the middle; the whole of an azure colour, but the bill and legs are of a glowing bright red.

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IV.

The STRIPED-HEADED ORIOLE.

Le Lorient Rayé, Buff.*Oriolus Radiatus*, Gmel.*Oriolus Capite striato*, Briss.*Merula Bicolor*, Aldrov.

This bird has been regarded by some as a Blackbird, by others as a Lorient: its true place seems to be between the Lorient and the Blackbirds, and since its proportions are different from those of either of these two species, I would consider it as an intermediate or related species, rather than as a mere variety.

The radiated Lorient is not so large as a Blackbird, and of a more slender shape: its bill, tail, and legs, are shorter, but its toes longer; its head is brown, delicately radiated with white; its wing-quills are also brown, and edged with white; all the body is of a beautiful orange, deeper on the upper-part than on the lower; the bill and the nails are nearly of the same colour, and the legs are yellow.

The T H R U S H E S.

Les Grives, Buff.*Turdi*, Linn. &c.

THE family of the Thrushes is certainly much related to that of the Blackbirds*; but it would be improper, as several naturalists have done, to confound them together. The common people appear to have acted more wisely, who have applied different names to objects which are really distinct. Those are termed Thrushes, whose plumage is speckled†, or marked with little strokes, disposed with a kind of regularity; on the contrary, those are Blackbirds whose plumage is uniform, or varied with large spots. We readily adopt this distinction, and reserving the Blackbirds for a separate article, we shall treat of the Thrushes in the present. We shall distinguish four principal species in our own climate, and to them we shall refer, as usual, their varieties and the foreign species most analogous.

The first species is the *Throstle*, Pl. Enl. No. 406; and I consider as varieties, the *White-*

* “*Merulæ et turdi amicæ sunt aves*,” says Pliny. There seems little doubt that the Blackbirds and Thrushes consort, since they are commonly caught in the same snares.

† The word *grivelé* is used in the original, and is formed undoubtedly from *grive*, the term for a Thrush.

beaded Thrush of Aldrovandus, the *Crested Thrush* of Schwenckfeld; and as foreign analogous species, the *Guiana Thrush*, Pl. Enl. No. 398, fig. 1. and the *Little American Thrush*, mentioned by Catesby.

The second species is the *Missel*, Pl. Enl. No. 489, which is the *turdus viscivorus* of the ancients, and to which I shall refer the *White Missel* as a variety.

The third species is the *Fieldfare*, Pl. Enl. No. 490; it is the *turdus pilaris* of the ancients. The varieties, the *Spotted Fieldfare* of Klein, and the *White-beaded Fieldfare* of Brisson. I reckon as the analogous foreign kinds, the *Carolina Fieldfare* of Catesby, which Brisson makes his eighth species of Thrushes, and the *Canada Fieldfare* of Catesby, which Brisson makes his ninth species.

The fourth species is the *Red-Wing*, Pl. Enl. No. 51, which is the *turdus iliacus* of the ancients.

Lastly, I shall subjoin some foreign Thrushes, which are too little known to be referred to their proper species: such are the *Green Barbary Thrush* of Doctor Shaw, and the *Chinese Hoami* of Brisson, which I shall admit into the Thrushes, upon the authority of that naturalist, though it appears to me to differ from them in its plumage and in its shape.

Of the four principal species belonging to our climate, the two first, which are the Throble
and

and the Miffel, resemble each other. Both appear to be less subject to the necessity of migration, since they often breed in France, Germany, Italy, and in short in those countries where they pass the winter. Both sing delightfully, and they are of the small number of birds whose warble is composed of a succession of notes; and they both seem to be of an unsocial disposition, for, according to some observers, they perform their journies alone. Frisch traces other analogies also between the colours of their plumage, and the order of their distribution, &c.

The two other species, *viz.* the Fieldfare and the Red-wing, are also analogous in some circumstances. They travel in numerous flocks, are more transitory, and seldom nestle in our climates; for which reason they sing very seldom *, and their song is unknown not only to many naturalists, but even to most sportsmen. It is rather a sort of chirping, and when a score meet on a poplar, they chatter all at once, making a very loud noise, which is far from being melodious.

Both sexes of the Thrush are nearly of the same size, and equally liable to change their plumage from one season to another †. In all

* FRISCH.—“ In summer (says TURNER), the *Turdus Pilaris* is seldom or never seen with us (in England); in winter no birds are more numerous.”

† “ They have one colour in winter, another in summer.”
ARISTOTLE.

of them the first *phalanx* of the outer toe is joined to that of the mid-toe, the edges of the bill scalloped near the tip. None of them subsists on seeds; whether because it suits not their appetite, or that their bill and stomach are too weak to break and digest them. Berries are their chief food, and hence they have received the epithet of *baccivorous*. They also eat insects, worms, &c. and it is in quest of these that they come abroad after rain, rove in the fields, and scrape the ground, especially the Missels and the Fieldfares. They make the same search in winter in places of a warm aspect where the ground is thawed.

Their flesh is a delicate food, especially that of the first and fourth species, which are the Thrush and the Red-Wing: but the ancient Romans held it in still higher estimation than we, and kept these birds the whole year in a sort of voleries, which deserve to be described*.

Each volery contained many thousand Thrushes and Blackbirds, not to mention other birds excellent for eating, such as Ortolans, Quails, &c. So numerous were these voleries in the vicinity of Rome, and in the territory of the Sabines, that the dung of the Thrushes was employed to manure the lands, and what is remarkable, to fatten oxen and hogs†.

* "Inter aves turdus . . . Inter quadrupedes gloria prima lepus." MARTIAL.

† Varro, *De re Rusticâ*. Lib. i. 31.

These Thrushes had less liberty in their voleries than our field pigeons in their dovecotes; for they were never suffered to go abroad, and they laid no eggs: but as they were supplied with abundance of choice food, they fattened to the great profit of the proprietor*. The voleries were a kind of vaulted courts, the inside furnished with a number of roosts. The door was very low, the windows were few, and placed in such manner as to prevent the prisoners from seeing the fields, the woods, the birds fluttering at liberty, or whatever might awaken their sensibility, and disturb the calm so conducive to corpulence. A little glimmering was sufficient to direct them to their food; which consisted of millet, and a sort of paste made with bruised figs and flour. They had also given them the berries of the lentisk, of the myrtle, of the ivy, and whatever in short would improve the delicacy and flavour of their flesh. They were supplied with a little stream of water, which ran in a gutter through the volery. Twenty days before they were intended for killing, their allowance was augmented; nay so far was the attention carried, that they gently removed into a little anti-chamber the Thrushes

* Each fat Thrush, except at the time of migration, sold for three *denarii*, equal to about two shillings sterling. And on the occasion of a triumph or public festival, this sort of trade yielded a profit of twelve hundred *per cent*. See *Collumella, de re Rusticâ*, lib. viii. 10.—and *Varro*, lib. iii. 5.

which

which were plump and in good order, to enjoy more quiet; and frequently to heighten the illusion, they hung boughs and verdure imitating the natural scenery; so that the birds might fancy themselves in the midst of the woods. In short, they treated their slaves well, because they knew their interest. Such as were newly caught, were put in small separate voleries along with others that had been accustomed to confinement; and every contrivance, every soothing art, was employed to habituate them somewhat to bondage; yet these were birds never completely tamed.

We can at present perceive some traces of the ancient practice, improved indeed by the skill of the moderns. It is common in certain provinces of France to hang pots in the tops of trees which are haunted by the Thrushes; and these birds finding convenient sheltered nests, seldom fail to lay their eggs in them to hatch and rear their young*. This plan contributes doubly to the multiplication of the species; for it both preserves the brood, and by saving the time spent in building nests, it enables them to make two hatches in the year†. When they find no pots, they construct their

* BELON.

† It appears even that they sometimes have three hatches; for Salerne found in the month of September a Thrush's nest in a vine containing three eggs not yet hatched, which appeared to be of the third hatch.

nests in trees or even bushes, and with great art; they cover the outside with moss, straw, dried leaves, &c. but they line the inside with a hard case formed of mud, compacted with straws and small roots. In this respect they differ from the Pies and Blackbirds, which lay their eggs on a soft mattress. These nests are hollow hemispheres about four inches in diameter. The colour of the eggs varies in the different species between blue and green, with some dull spots that are most frequent on the large end. Every species has also its peculiar song; and sometimes they have even been taught to speak*. But this must be understood chiefly of the Throffle and the Missel, in which the organs of voice seem to be the most perfect.

It is said that the Thrushes swallow the berries entire of the juniper, the milletoe, the ivy, &c.†, and void them so little altered, that when they fall in a proper soil, they germinate and produce. But Aldrovandus affirms that, having made these birds swallow the grapes of the wild vine and the berries of the milletoe, he could never discover in their excrements any of these that retained its form.

The Thrushes have a ventricle more or less muscular, no craw, nor even a dilatation of the

* “ Agrippina, the wife of Claudius Cæsar, had a Thrush which imitated human speech.” Pliny, lib. x. 42.

† Linnaeus.

resphagus which may supply its place, and scarce any *cæcum*; but all of them have a gall bladder, have the end of the tongue parted into two or three threads, and have eighteen quills in each wing, and twelve in the tail.

These birds are sad and melancholy, and as the natural consequence of that disposition, they are the more enamoured of liberty. They seldom play or even fight together; still less will they bend to domestic slavery. But their love of freedom is not equalled by their resources for preservation. Their oblique and tortuous flight is almost their only protection against the shot of the sportsman, or the talons of the bird of prey*. If they reach a close branchy tree, they remain still through fear, and can hardly be beat out†. Thousands of them are caught in snares; but the Throstle and the Red-Wing are the two species which can the most easily be caught by the noose, and almost the only ones that can be taken by the call.

These nooses are nothing but two or three horse-hairs twisted together, and forming a running knot. They are placed round the junipers or service-trees in the neighbourhood of a fountain or a mere, and when the place is well chosen, and the springs properly set, several

* Skilful sportsmen assure me that Thrushes are difficult to shoot, even more so than Snipes.

† This is, perhaps, the reason that they are said to be deaf; *Κωφοίτερος κίχλη*, *deafest than a Thrush*, was a proverb in Greece. But all the fowlers assure me that the Thrush has a very quick ear.

hundred Thrushes have been caught in a day in the space of a hundred acres.

It is ascertained from observations made in different countries, that when the Thrushes appear in Europe about the beginning of the autumn, they arrive from the countries of the north in company with those numerous flocks of birds which, on the approach of winter, traverse the Baltic sea, and leave Lapland, Siberia, Livonia, Poland, and Prussia, for more temperate climates. So abundant are the Thrushes then on the southern shore of the Baltic, that, according to the computation of Klein, the single city of Dantzic consumes every year ninety thousand pairs. It is equally certain that the survivors which emigrate again after the rigors of winter, direct their course towards the north. But the different species arrive not all of them at the same time. In Burgundy, the Throstle appears the first, about the end of September, next the Red-Wing, and last of all, the Fieldfare and the Mistle; but the latter species is much less numerous than the three others, which might be expected, since it is more dispersed.

We must not suppose that all the species of Thrushes pass constantly in the same number; sometimes they are very few, because the season has either been unfavourable to their multiplication, or to their migration*; at other times they

* I am assured that some years the Red-Wings are very rare in Provence; and this is the case also in the northern countries.

are extremely numerous: and a very intelligent observer * has informed me, that he saw prodigious clouds of Thrushes, chiefly Red-Wings and Fieldfares, alight in the month of March at Brie, and cover an extent of seven or eight leagues. This appearance, which was unexampled, lasted near a month, and it was remarked that the cold had continued very long that winter †.

The ancients said that the Thrushes came every year into Italy from beyond seas about the autumnal equinox, and that they returned about the vernal equinox, and that in both passages ‡ they assembled and rested in the islets of Pontia, Palmaria, and Pandataria; which are nigh the Italian coasts. They repose too in the island of Malta, where they arrive in October and November; the north-west wind brings some flocks, the south or south-west sometimes beats them back. But they do not always arrive with certain winds, and their appearance depends oftener on the state of the air than on its motion; for if, in calm weather, the sky suddenly darkens with the preludes of a storm, the ground is then covered with Thrushes.

Nor does the island of Malta appear to limit the migration of the Thrushes towards the

* Hebert.

† Letters of M. le Commandeur Godeheu de Riville, tom. i. pp. 91, 92. *Mém. Etran.*

‡ Varro; *De Re Rustica*, lib. iii. 5. These islets lie south of the city of Rome, somewhat to the east: That of *Pandataria* is at present known by the name *Ventotene*.

south; for they are found in the interior parts of the African continent, from whence they annually pass, it is said, into Spain *.

Those which remain in Europe spend the summer in the mountain forests: and on the approach of winter, they remove from the heart of the woods where the fruits and insects begin to fail, and settle on the skirts of the adjacent plains. It is, no doubt, during this flitting that in the beginning of November so great a number are caught in the forest of Compigne. It is uncommon, says Belon, to find the different species in numbers at the same time; and in the same place.

In all of them the edges of the upper mandible are scalloped near the point, the inside of the bill is yellow, its base has some black hairs or bristles projecting forwards, the first *phalanx* of the outer-toe is joined to that of the middle-toe, the upper-part of the body is of a deeper brown, and the under lighter and speckled; lastly, in all, or in most of them, the tail is

* “ Being in Spain in 1707,” says the translator of Edwards, “ in the kingdom of Valencia, on the sea-coast, I saw in October great flocks of birds that came in a direct course from Africa. Some were killed, and found to be Thrushes, but so dry and lean, that they had neither substance nor taste. The people of the country told me that every year at the same season such flocks arrive, but that most of them proceed much further.” Admitting the fact, I still doubt whether these Thrushes really come from Africa; for this would be contrary to their usual route, and the tendency of their flight on their arrival is no proof of the direction of their whole course.

nearly

nearly a third of the total length of the bird, which varies in the different species between eight and eleven inches, and is only two-thirds of the alar extent ; the wings when closed reach as far as the middle of the tail, and the weight of the bird is between two ounces and a half and four and a half.

Klein asserts, he is well informed that Thrushes are found also in the northern parts of India, but which differ from ours in not migrating.

The THROSTLE*.

La Grive, Buff.

Turdus Musicus, Linn. and Gmel.

Turdus Minor, Briss.

Turdus in altissimis, Klein.

The Marvis, Throstle, or Song-Thrush, Will.

THIS species, in the French language, gives name to the whole genus. I have therefore ranged it in the first place, though in point of size it occupies only the third. It is very common in some parts of Burgundy, and called by the country people *The Little Thrush* †, or *Little Red-Wing* ‡. It commonly arrives every year about the time of vintage, probably attracted by the maturity of the grapes; and hence undoubtedly it has received the name of *Vine-Thrush*. It disappears during the frosts, and again makes a transient visit in the months of March or April before its migration in May. On the departure of the flock, they always leave a few stragglers behind, which are either unable to follow the main body, or, yielding to

* In Greek, Κίχλα or Κοχλη: In Latin, *Turdus*: In Italian, *Tordo Mezzano*: In Spanish, *Zorzal*: In German, *Drossel*, or *Drossel* (hence the English name); and in Brandenburg, *Zippe*: In Poland, *Drozd*: In Smoland, *Klera*; and in Ostrogothia, *Klaedra*.

† *Griquette*.

‡ *Mauvette*.

the mild influence of spring, stop and breed in the forests that occur in their route*. This is the reason why some Thrustles constantly remain in our woods, where they build their nest on the wild apple and pear-trees, and even in junipers and in the bushes, as has been observed in Silesia † and in England ‡. Sometimes they fix it in the trunk of a thick tree ten or twelve feet high, and prefer, for the materials, wood rotten and worm-eaten.

They generally pair about the end of winter, and form lasting unions. They make two hatches in the year, and sometimes a third, when their former have not succeeded. The first laying consists of five or six eggs, of a deep blue with black spots, most frequent at the large end; and in the subsequent hatches the number regularly diminishes. It is difficult in this species to separate the males from the females; their size being the same in both sexes, and the colours of their plumage, as I have said, subject to vary. Aldrovandus saw, and caused to be delineated, three of these birds, caught in different

* Dr. Lottinger assures me, that they arrive in the months of March and April in the mountains of Lorraine, and that they return in September and October. Hence it would follow that in these mountains, or rather in forests that cover them, they pass the summer, and from these retreats visit us in autumn. But must we apply this local remark of Lottinger's to the whole species? Observations alone will decide.

† Frisch,

‡ British Zoology.

seasons; all which differed in the colours of their bill, of their legs, and of their feathers: in one of them the streaks on the breast were hardly perceptible. Frisch asserts, however, that the old males have a white ray above the eyes, and Linnæus makes these white eyelids one of the characters of the species. Almost all the other naturalists agree, that the young males can hardly be distinguished but by their early inclination to chant: for the Thrustle sings delightfully, especially in the spring*, whose return it announces; and as it breeds several times in the year, it enjoys a succession of the vernal pleasures, and may be said to warble three-fourths of the year. It sits whole hours on the top of a tall tree, straining its delicate throat. Its warbling consists of several different couplets, like that of the Mistle, but still more varied and more charming; which has obtained for it in many countries the denomination of the *Singing Thrush*. The song is undoubtedly intended to attract the female; for even the imperfect imitation of it will produce that effect.

Each brood follows separately their parents; sometimes several of these chancing to meet in the same wood, would induce us to think that

* On its first arrival, about the end of winter, it has only a feeble whistle, day and night, like the Ortolans.

they associate in numerous flocks*; but their union is fortuitous and momentary; the families soon separate, and even the individuals disperse after they are able to provide singly their subsistence †.

These birds are found in Italy, France, Lorraine, England, Scotland, Sweden, where they haunt the forests which abound with maples ‡. They migrate from Sweden into Poland fifteen days before and after the festival of St. Michael, when the weather is warm and calm.

Though the Thrustle is quick-sighted, and very alert to avoid its declared enemies, and to escape from manifest dangers; it has at bottom but little cunning, and is quite unguarded against concealed stratagems: it is easily caught either by the call or the gin, though less so than the Red-Wing. In some parts of Poland, such numbers are taken that small barks are loaded with them for exportation §. It is a bird that delights in woods; and in such places the snares may be laid with success. It seldom is met with in the plains, and even when it visits the vines it constantly retires into the neighbouring copses in the evening, and during the heat of the day;

* Frisch.—Dr. Lottinger also says, that though they do not migrate in troops, many are found together or pretty nigh each other.

† I am assured, however, that they like the company of the Calendar Larks.

‡ Linnæus, *Fauna Suecica*.

§ Rzaczinski.

so that to succeed in catching the Throistle, we ought to choose the proper time; its departure in the morning, and its return in the evening, or the mid-day, when the sun's rays are most oppressive. Sometimes they are intoxicated with eating ripe grapes, and then they fall an easy prey.

Willughby informs us, that this species breeds in England, and resides there the whole year; and he adds, that its flesh is excellent, but partakes of the quality of its food. Our Throistle subsists in autumn on chestnuts, beech-mast, grapes, figs, ivy-berries, juniper-berries, the fruit of the service-tree, and such like aliments. We are not so certain what it lives upon in the spring. In that season it commonly appears on the ground in the woods; in wet places, and among the bushes which skirt the flooded meadows, where it may be supposed to search for earth-worms, snails, &c. If an intense vernal frost happens, the Throstles, instead of flying to milder climates, retire to the springs, and languish and pine; and a continuance of this severe weather will destroy many of them. This would seem to shew, that cold is not the sole cause of their migrations, but that they have a certain circuit to describe annually in a given time. It is said that pomegranates prove a poison to them. In Bugey, the nests of the Throstles are much sought after, or rather their

their young, which are dressed into delicate dishes.

I should suppose that this species was unknown to the ancients; for Aristotle reckons only three kinds *, which are all different from the present, and of which we shall treat in the following articles. Nor can we imagine that Pliny meant this when he speaks of a new species which appeared in Italy in the time of the war between Otho and Vitellius; for that bird was almost as large as a Pigeon †, and therefore four times the size of the Throstle, which weighs only three ounces.

I have observed in a Throstle which lived some time with me, that when it was angry it cracked and snapped with its bill; its upper mandible was also moveable, though much less than the lower; also its tail was somewhat forked, which is not very evident from the figure ‡.

* *Hist. Anim.* lib. ix. 20.

† Pliny, lib. x. 49.

‡ Specific character of the Throstle, *Turdus Muscus*, LINN.—
“Its wing-quills are ferruginous at their inner base.” It is nine inches long, and its alar extent thirteen and a half. It sings, especially in the evenings of the spring, from the top of the highest tree; and breeds in bushes and thickets. Its nest is formed with earth, moss, and straws, the inside plastered with clay. It lays five or six eggs of a bluish green, variegated with a few black spots.

VARIETIES *of the* THROSTLE.

I. The WHITE THROSTLE. The sole difference consists in the whiteness of its plumage; a quality which, though commonly ascribed to the influence of the northern climates, may be produced by accidental causes in the more temperate countries, as we have remarked in the history of the Raven: but this colour is not spread over the whole body, nor is it pure. The breast and neck are marked with the speckles peculiar to the Thrushes, though far more dilute and faint; the back is shaded with a mixture of brown, and the breast tinged with rufous, as in those figured by Frisch, pl. 33, but without any description. Sometimes none of the upper part of the body, except the head, is white, as in that described by Aldrovandus; at other times the lower part of the neck only is marked by a white-cross-bar, like a half collar; and, in different individuals, this colour certainly mingles variously with those proper to the species.—But distinctions of that sort cannot form even permanent varieties.

II. The CRESTED THRUSH, mentioned by Schwenckfeld, must also be regarded as a variety of this species; not only because it is of the same size, and its plumage similar, except

cept a whitish tuft, formed like that of the Crested Lark, and also its collar white, but because it is very rare. It may be even said, that hitherto it is *unique*, since Schwenckfeld is the only person who has seen it, and that only once when it was caught in 1599 in the forests of the Dutchy of Lignitz.—It may be proper to mention, that these birds have sometimes a crest formed in drying, from the contraction of certain muscles of the skin which cover the head:

FOREIGN BIRDS, THAT ARE RELATED TO THE THROSTLE.

I.

The GUIANA THRUSH.

La Griue de la Guyane, Buff.

Turdus Guianensis, Gmel.

THE coloured figure conveys nearly all the information which we possess with regard to this little bird. Its tail is longer, and its wings proportionably shorter than in the Throstle; but its colours are nearly the same, only the speckles are spread as far as the last of the inferior coverts of the tail.

As the Throstle visits the countries of the north, and is besides very fond of changing its residence, it may have thence migrated into North America, and penetrated towards the south, where it would experience the alterations produced by the difference of climate and of food *.

* Specific character of the *Turdus Guianensis*:—"Above it is
"dusky-greenish, below okery-white, with black longitudinal
"streaks."

II. The

II.

The LITTLE THRUSH.

La Griquette d'Amerique, Buff.*Turdus Minor*, Gmel.*Turdus Iliacus Carolinensis*, Briss.*Turdus Minimus*, Klein.*Merula Tusca*, Sloane.

This bird occurs not only in Canada, but in Pennsylvania, Carolina, and as far as Jamaica: it spends only the summer in the northern provinces; though in the milder regions of the south it resides the whole year. In Carolina it haunts the thickest woods contiguous to the swamps; but in the hotter climate of Jamaica it retires to the forests that cover the mountains.

The specimens described or figured by naturalists differ in the colours of their feathers, of their bill, and of their legs; which would imply (if they all belong to the same species), that the plumage of the American Thrushes is no less variable than those of Europe, and that they all spring from a common stem. This conjecture derives force from the numerous analogies which this bird has to the Thrushes, in its shape, in its port, in its propensity to migrate, and to feed upon berries, in the yellow colour of its internal parts, observed by Sloane, and in the speckles

which appear on its breast ; but it seems the most nearly related to our Throftle and Red-Wing, and a comparison of the points of similarity is necessary to determine the species to which it belongs.

This bird is smaller than any of our Thrushes, as in general are all the birds of America, if compared with their archetypes in the old continent. Like the Red-Wing, it does not sing, and has fewer speckles than that species, and therefore than any of the genus ; like the Red-Wing also, its flesh is delicate.—So far the American Thrush resembles the Red-Wing, but it has more numerous relations to our Throftle ; and, in my opinion, more decisive ones. It has beards round the bill, a sort of yellowish plate on the breast ; it readily settles and remains in a country which affords it subsistence ; its cry is like the winter-notes of the Throftle, and therefore unpleasant, as generally are the cries of all birds that live in wild countries inhabited by savages. Besides, the Throftle, and not the Red-Wing, is found in Sweden, whence it could easily migrate into America.

This Throftle arrives in Pennsylvania in the month of May ; it continues there the whole of the summer, during which time it hatches and raises its young. Catesby tells us, that few of these Throftles are seen in Carolina, whether because a part only settle of what arrive, or that, as we have already observed, they conceal themselves



THE REED THRUSH .

elves in the woods. They subsist on the berries of the holly, of the white-thorn, &c.

In the specimens described by Sloane, the nostrils were wider, and the feet longer than in those described by Gaterby and Brisson. Nor was their plumage the same; and if these differences were constant, we should have reason to conclude that they belong to another family, or at least are a permanent variety of this species. [A]

[A] Gmelin and Latham make the American and the Jamaica Throistle to be two different species. The former, *Turdus Minor*, is thus characterized by Latham:—"It is dusky-rufous, the under-side of its body variegated with blackish spots; the upper-part of its throat, its belly, and its vent, white." The specific character of the latter, the *Turdus Jamaicensis*, or *Jamaica Thrush*:—"It is dusky-cinereous, below white; its throat striated longitudinally with brown, its breast cinereous."

M

III.

The REED THRUSH*.

La Rousserole, Buff.

Turdus Arundinaceus, Linn. Gmel. and Brisson.

Junco, Gesner, Aldrov. Ray, and Will.

This bird has been called the River Nightingale, because the male chants night and day,

* In Latin it has been called *Junco*, *Cinclus*, *Turdus Palustris* (Marsh-Thrush), *Passer Aquaticus* (Water-Sparrow): in Italian, *Passere*

day, while the female is employed in hatching, and because it haunts wet places. But though its song has a greater extent, it is far from being so pleasant as that of the Nightingale. It is commonly accompanied with a very brisk motion, and a trembling of the whole body. The bird climbs like the Creepers along the reeds and the low willows in search of insects, which constitute its food.

The habit of this bird in frequenting the marshes would seem to exclude it from the family of the Thrushes; but it resembles them so much in its external form, that Klein, who saw one almost alive, since it was killed in his presence, doubts whether it could be referred to another genus. He informs us, that these birds inhabit the islands in the mouth of the Vistula, and make their nest on the ground along the sides of the little hillocks covered with moss*. He suspects that they pass the winter in the dense marshy forests†; and he adds, that the upper-part of their body is a rufous brown, the lower of a dirty white, with some ash spots; the

Passere d'Acqua: in the language of the American Indians, *Atototloquichitl*, according to Nieremberg; *Acototloquichitl*, according to Fernandez; *Caracura*, according to Laët. The French name *Rousserole* is derived from *rousse*, the feminine of *roux*, which denotes its rufous plumage.

* It builds among the canes, says Belon, with small reed-straw, and lays five or six eggs.

† Belon at first supposed the Reed-Thrush to be a bird of passage, but afterwards discovered the contrary.

bill black, the inside of the mouth orange, as in the Thrushes, and the legs lead-coloured.

An intelligent observer has assured me that he was acquainted in Brie with a small bird of this kind, and vulgarly called *Effarvatie*, which also prattles continually, and lodges among the reeds like the other. This reconciles the opposite opinions of Klein and Brisson with regard to the size of the Reed-Thrush; the former maintaining that it is as large as a Thrush, the latter that it does not exceed the Lark. It flies heavily, and flaps with its wings; the feathers on its head are longer than the rest, and form an indistinct crest.

Sonnerat brought from the Philippines a true Reed-Thrush, exactly similar to that of No. 513*.

* Specific character of the *Turdus Arundinaceus*:—"It is dusky-ferruginous, below of a chalky-white, its wing-quills marked with tawny stripes at the tips." It is larger than a Lark, being seven inches long. Its eggs are yellowish-white, with dusky spots,

M

IV.

The MISSEL THRUSH*.

La Draine, Buff.

Turdus Viscivorus, Linn. Gmel. Gefner, Aldrov. &c.

Turdus Major, Briss.

Turdus Viscivorus Major, Ray.

The Mistletoe-Thrush, or *Sbreitch*, Charl.

The Mistle-Bird, or *Sbrite*, Will.

The Missel weighs five ounces, and is distinguished by its magnitude from all the other Thrushes: but it is far from being so large as a Magpie, which Aristotle is made to assert †; an error probably of the copyist; or perhaps it attains to a greater size in Greece than with us.

The Greeks and Romans considered the Thrushes as birds of passage ‡, not excepting the Missel, with which they were perfectly acquainted under the name of *viscivorous Thrush*, or *feeder on mistletoe-berries* §.

In

* In Greek, ἰξορορος, or μυροπτελλος: in Turkish, *Garatauk*: in Italian, *Tordo*, *Turdela*, *Gardenna*, *Dressa*, *Dressano*, *Gafotto*, *Columbina*: in German, *Zeber*, *Zerner*, *Ziering*, *Schnarrek*, *Schnerrer*: in Polish, *Orozd*, *Naywicki*, *Jemielucha*, *Cnapio*: in Welch it is called *Pen y llwyn*, which signifies *master of the coppice*.

† *Hist. Anim.* lib. ix. 20.

‡ *Aristot. Hist. Anim.* lib. viii. 16.—*Pliny*, lib. x. 24.—*Varro De Re Rusticâ*, lib. iii. 5.

§ Bird-lime (*viscus*) was formerly made from the berries of the mistletoe; hence the Latin proverb *Turdus malum sibi cacat*; that parasite

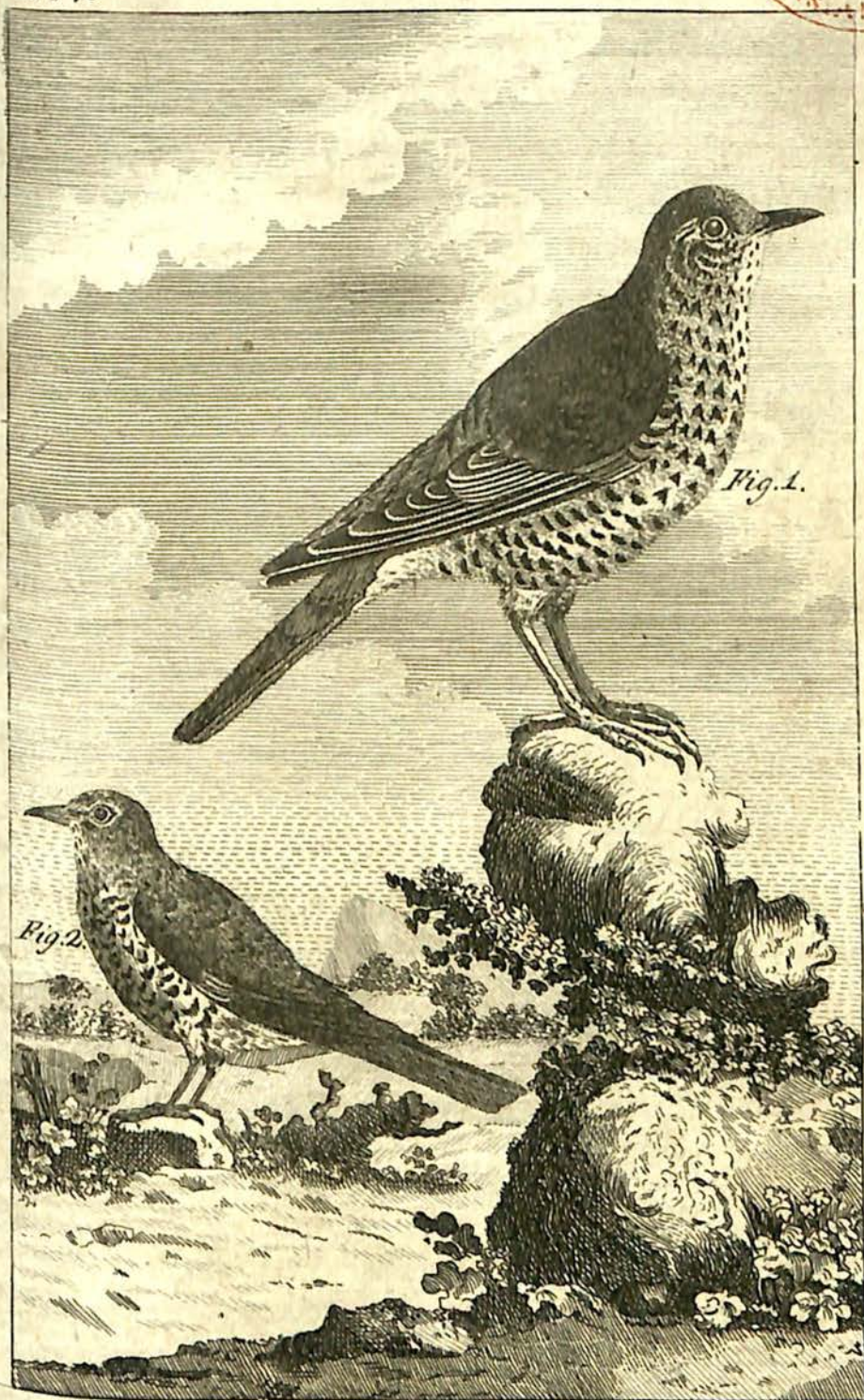


FIG.1. THE MISSEL BIRD. FIG.2. THE THRUSTLE.

In Burgundy, the Missels arrive in flocks about the months of September and October, coming most probably from the mountains of Lorraine*. Part of them pursue their journey, and depart always in numerous bodies in the beginning of winter, while the rest remain till the month of March; for some of them always continue during the summer both in Burgundy, and in other provinces of France, of Germany, of Poland†, &c. In Italy also, and in England, so many nestle that Aldrovandus saw the new brood sold in the markets; and Albin regards the Missels as not birds of passage‡. Those

parasite plant being supposed to be propagated on the oak from the berries voided by the Missels. Bird-lime is now obtained by macerating the inner bark of holly.

* Dr. Lottinger of Sarbourg assures me, that such of the Thrushes as remove from the mountains of Lorraine on the approach of winter, depart in September and October, and return in the months of March and April; and that they breed in the forests with which the mountains are covered, &c. This account agrees well with what we have given from our own observation. But I must confess that another remark of that gentleman disagrees with one of a very intelligent ornithologist: The latter (M. Hebert) pretends that in Brie the Thrushes assemble at no time of the year; whereas M. Lottinger asserts that in Lorraine they always fly in flocks, and in fact they seem to arrive in troops about Montbard, as I have remarked. Can their habits differ in different countries, or in different times? This is not altogether unexampled; and I must add, from a more particular observation, that after the November passage is over, those which remain in our districts live separately till the time of hatching: in short, that the assertions of these two observers may be true, with certain restrictions.

† Rzaczynski.

‡ The authors of the British Zoology are of the same opinion.

which remain lay and hatch successfully. They build their nests, sometimes in trees of a middling height, and sometimes on the top of such as are extremely tall, but always prefer those which are most covered with moss. They construct both the inside and outside with herbage, leaves, and moss, especially the white moss; and their nest resembles more that of the Blackbird than of the other Thrushes, except its being lined with bedding. They lay four or five gray-spotted eggs; they feed their young with caterpillars, worms, slugs, and even snails, the shell of which they break. The parents eat all sorts of berries during the summer, cherries, grapes, olives, the fruits of the cornel and the service-trees; and in winter they subsist upon the berries of the juniper, of the holly, of the ivy, of the buck-thorn; upon beech-mast, sloes, fennel, and, above all, upon mistletoe berries. When disturbed they cry *tré, tré, tré*; hence their name in the dialect of Burgundy *draine* and even some of the English names. In the spring the females have no other notes; but the males, sitting on the tops of the trees, sing charmingly, and their warble consists of different airs that form a constantly varied succession. In winter they are no longer heard. The male differs not in external appearance from the female, except that he has more black in his plumage.

These

These birds are of a gentle pacific temper; they never fight with one another, but yet are anxious for their own safety. They are more cautious even than the Blackbirds, which are generally reckoned very shy and timorous; for these are sometimes decoyed by the call, while the Missels resist the allurements. They are, however, caught sometimes in gins, though less frequently than the Thrushes or Red-Wings.

Belon asserts, that the flesh of the Missel, which he calls the Great Thrush, is of a superior flavour to that of the other species; but this is contrary to the account of all other naturalists, and to my own experience. Our Missels live not indeed upon olives, nor our small Thrushes upon mistletoe-berries, as those of which he speaks; and it is well known how much the difference of food affects the quality of game*.

* Specific character of the *Turdus Viscivorus*:—"Its back is dusky, its neck spotted with white, its bill yellowish." The Missel Thrush resembles much the Thrush, but the spots on its breast are large and round, not elongated as in the latter; and the inner coverts of its wings are white, those of the Thrush yellow. It is also of superior size; for it is eleven inches long, sixteen and a half broad, and weighs near five ounces. It builds its nest in bushes, or in the sides of trees, particularly the ash.

M.

VARIETY of the MISSEL THRUSH.

The only variety I find in this species is the Whitish Missel noticed by Aldrovandus. The quills of its tail and wings were of a light and almost whitish colour, the head and all the upper-part of the body cinereous.

We may remark in this variety the alteration of the colour of the quills, of the wings, and of the tail, which are commonly supposed to be the least liable to change, and as being of a deeper dye than the other feathers.

I may add that there are always some Missels which breed in the Royal Garden on the leafless trees; they seem to be very fond of yew berries, and eat so plentifully of them that their excrements are red; they are also attached to the fruit of the loto.

In Provence the people have a sort of call with which they imitate the vernal song of the Missel Thrush and of the Throstle. The person conceals himself in a green arbour, from which he can see through a loop-hole a pole, which he has fastened to a neighbouring tree; the Thrushes are invited by the call and expecting to meet with their companions, alight on the pole, and fall by the shot of the fowler.

THE FIELDFARE*.

La Litorne, Buff.

Turdus Pilaris, Linn., Gmel. Gesner, and Aldrov.

Turdus Pilaris, seu *Turdela*, Briss.

THIS Thrush is the largest after the Mistle; and like it can hardly be decoyed by the call, but may be caught by a noose. It differs from the other Thrushes by the yellow colour of its bill, the deeper brown of its legs, and the cinereous sometimes variegated with black, which spreads over its head, behind its neck, and upon its rump.

The male and female have the same cry, which will equally attract the wild Fieldfares in the season of migration †. But the female is distinguished from the male by the colour of her bill, which is much duller. These birds, which breed in Poland and Lower Austria ‡, never nestle in France. They arrive in flocks with the Red-Wing about the beginning of December, and make a loud noise as they fly §.

* In Greek, *Τειξα*; which is also adopted in Latin: in Italian, *Viscada*; *Viscardo*, (I suspect these names to belong to the Mistle Thrush;) in Spanish, *Zorzol*: in German, *Krammet-Vogel*, *Ziemmer*: in Swiss, *Reckolter*, *Wecholter*; *Wachholder-drossel*: in Polish, *Drozd-Srzedni*, *Kwiczot*: in Danish, *Dobbel Kramsfugl*: in Norwegian, *Glaae Trost*, *Fjeld-Trost*, *Norden Vinds Fibe*: in Swedish, *Kramsfogel*, *Snoskata*.

† Frisch.

‡ Klein, and Kramer.

§ Rzaczynski.

They

They haunt the unploughed fields which are interspersed with juniper bushes, and when they appear again in the spring *, they prefer the wet meadows. In general they inhabit the woods much less than the two preceding species. Sometimes they make an early but transient appearance when the services are ripe, of which they are very fond, though they nevertheless return at the usual time.

It is not an uncommon thing to see the Fieldfares assemble to the number of two or three thousand in a spot where there are ripe services, which they devour with such voracity, that they throw half of them on the ground. After rains they frequently run along the ditches in search of worms and slugs. In the time of hard frosts, they live upon the haws of the white-thorn, the berries of the milletoe, and those of other plants †.

We may infer then that the Fieldfares are of a much more social disposition than the Thrushes or the Mistlethrushes. They sometimes go single, but for the most part they form, as I have already remarked, very numerous flocks, fly in a body, and spread through the meadows in search of food, never losing sight of their society. They all collect together upon the same tree at certain hours of the day, or when at any time

* They arrive in England about the beginning of October, and depart in the month of May. BRITISH ZOOLOGY.

† Lottinger.

they are alarmed at the near approach of a person.

Linnaeus mentions a Fieldfare, which was bred in the house of a wine-merchant, and became so familiar that it would run along the table and drink the wine out of the glasses; it drank so much that it grew bald, but being shut up in its cage and denied wine, it recovered its plumage *. This little anecdote presents two remarkable facts; the effect of wine upon the feathers of a bird, and the instance of a tame Fieldfare, which is very uncommon; for the Thrushes cannot be, as I have before said, easily domesticated.

The Fieldfares are the more numerous in proportion to the severity of the weather; they seem to be even a sign of its continuance, for the fowlers and those who live in the country judge that the winter is not over as long as the Fieldfares are heard. They retire in summer into the northern countries, where they breed and find abundance of junipers. Frisch ascribes to this sort of food the excellent quality he discovered in their flesh. I own that there is no disputing about tastes, but I must say that in Burgundy this Thrush is reckoned very indifferent eating, and that in general the flavour communicated by juniper is always somewhat bitter. Others assert that the flesh of the Fieldfares is

* *Fauna Suecica*, p. 71.

never better or more succulent than when it feeds on worms and insects.

The Fieldfare was known by the ancients under the name of *Turdus Pilaris*; not because it has been always caught with a noose, as Salerne says, a quality which would not have distinguished it from the other Thrushes, but because the hairs or black bristles round its bill, which project forwards, are longer in this species than in the Throstle or the Mistle. We may add, that its claws are very strong, as remarked in the British Zoology. Frisch relates, that if the young of the Mistle be put in a Fieldfare's nest, it will feed and educate them as its own; but I would not thence infer, as Frisch has done, that we might expect to obtain an hybridous race; for no person surely looks for a new breed between the hen and the drake, though the hen often rears whole hatches of ducklings. [A]

[A] Specific character of the Fieldfare, *Turdus Pilaris*:—"Its tail-quills are black, the outermost whitish at the tip of their inner margin, the tail and rump hoary." It is ten inches long, seventeen broad, and weighs four ounces. The Fieldfares never breed in Great Britain, but arrive in flocks with the Red-Wings in the end of September, and retire in the beginning of March: but what is singular, they appear for a fortnight about Michaelmas, and again for about a week in April. Linnæus and Latham think that the Fieldfares were the Thrushes which the Romans fattened in their voleries.

M

VARI-

VARIETY of the FIELDFARE.

The PIED or SPOTTED FIELDFARE. It is variegated with white, black, and many other colours, so distributed that except the head and the neck, which are white spotted with black, and the tail, which is entirely black, the dusky hues, interspersed with white spots, prevail on the upper-part of the body; and, on the contrary, the light colours, especially the white, are spread over the lower-part marked with black speckles, most of which are shaped like small crescents. This Fieldfare is of the ordinary size.

We ought to refer to this the *White-headed Fieldfare* of Brisson. It has no black speckles, and as its white is what alone distinguishes it from the common Fieldfare, we may consider it as intermediate between that and the Spotted Fieldfare. It is even natural to suppose that the change of plumage would begin at the head, since the colour of that part varies in different individuals.

FOREIGN BIRDS, WHICH ARE RELATED TO THE FIELDFARE.

I.

The CAYENNE. FIELDFARE.

Turdus Cayanensis, Gmel.

The Cayenne Thrush, Lath.

I REFER this Thrush to the Fieldfare, because it appears to be more closely related to that species than to any other, by the colour of the upper-part of its body and of its legs. It differs in many respects from the whole genus: its breast and the under-part of its body are not so distinctly dappled; its plumage is more extensively variegated, though in a different manner, almost all the feathers of the upper and under-side of the body being edged with a lighter colour, which marks nicely their shape; and lastly, the lower mandible is scalloped near the point;—and these differences are sufficient to constitute it a distinct species, till we are better acquainted with its habits and dispositions*.

* Specific character of the *Turdus Cayanensis*:—"It is cinereous, below partly white, the greater coverts of its wings, and the quills, black; the upper-part of the throat, the bill, and the legs, black." It is of the size of the Thrush, being eight inches long.

II.

The CANADA FIELDFARE.

Turdus Migratorius, Linn. Gmel. and Klein.

Turdus Canadensis, Briss.

The Fieldfare of Carolina, Catesby.

The Red-breasted Thrush, Penn. and Lath:

Fieldfare is the name which Catesby applies to the Thrush described and figured in his Natural History of Carolina; and I adopt it the more readily, since that species spends at least a part of the year in Syeden, and could thence migrate into the New World, and produce other varieties: In the Canada Fieldfare the orbits are white, there is a spot of the same colour between the eye and the bill, the upper-part of the body is brown, the under orange before, and variegated behind with dirty white and rusty brown, shaded with a greenish-tinge; there are also some speckles under its throat, whose ground colour is white. In winter it advances in numerous flocks from the northern parts of America to Virginia and Carolina, and returns in the spring. It resembles our Fieldfare in this circumstance, but it sings better *. Catesby says that it has a

* We must remember that the song of a bird cannot be known unless it be heard in the season of love, and that the Fieldfare never breeds in our climates.

sharp note like the Guy Thrush or Mistle. He also tells us that one of these Canada Field-fares having discovered the first privet that was planted in Virginia, took so great a liking to the fruit, that it remained all the summer. Catesby was informed that these birds breed in Maryland, where they remain the whole year. [A]

[A] Specific character of the *Turdus Migratorius* :—" It is gray, its belly rufous, its eyelids white, the outermost tail-quill white at its inner tip." The Red-breasted Thrushes seem to traverse the whole extent of North America. In Hudson's Bay they appear in pairs about the beginning of May : at Moose Fort they nestle, and hatch in fourteen days ; at Severn Settlements four degrees farther north, they require twenty-six. In the State of New-York they arrive in February, lay their eggs in May, and retire southwards in October. They live upon worms, insects, the seeds of the sassafras shrub, and various sorts of berries. Their nest is composed of roots, moss, &c. The male is assiduous in aiding his mate during incubation. She lays four or five eggs, of a fine sea-green.

M

The

III.

The RED - WING*.

Le Mauvis, Buff.*Turdus Iliacus*, Linn. and Gmel.*Turdus Minor*, Gesner.*Turdus Illas*, seu *Tylas*, Aldrov.*The Red-Wing*, *Sawinepipe*, or *Wind Thrush*, Will.

This small Thrush is the most useful of them all, since it is the best to eat, especially in Burgundy, where its flesh is delicious †. Besides, it is oftener caught in the noose than any other, and is therefore the most valuable species both for its quantity and its quality ‡. It generally appears the second, that is, after the Throstle and before the Fieldfare; and it arrives in large bodies in November, and departs before Christmas. It breeds in the woods near Dantzic §,

* In Italian, *Malvizzo*, *Tordo-facello*, *Cion*, *Cipper* * in Spanish, *Malvis*: in German, *Wein-drostel* (Wine-throstle), *Roth-drostel* (Red-throstle), *Heide-drostel* (Heath-throstle), *Pfies-drostel* (Pipe-throstle), *Bebemle*, *Boemerlin*, *Boemerle*: in Swiss, *Berg-Trostel*, *Winzel*, *Girerle*, *Gixerle*: in Polish, *Drozd-mniejszy*: in Swedish, *Klera*, *Kladra*, *Tall-Traft*.

† Linnæus asserts the contrary, *Syst. Nat.* p. 169. This difference between one country and another depends probably on that of the quality of the food, or perhaps on that of tastes.

‡ Frisch and the fowlers assert, that it is not easily taken with nooses, when they are made of white or of black hairs: in Burgundy they are made of these two sorts twisted together.

§ Klein.

but seldom or never settles in our provinces, or in Lorraine, where it arrives in April, and retires about the end of the same month, and appears not again till autumn ; though that country affords abundance of proper food in its vast forests. It halts there a certain time at least, and does not, as Frisch asserts, remove merely into some parts of Germany. Its common food is berries and small worms, which it finds by scraping the ground. It is distinguished from the other Thrushes, by its feathers being more glossy and shining, its bill and eyes of a deeper black than the Throstle, whose size it approaches, and by its having fewer speckles on the breast. It is also remarkable for the orange colour under its wing, a circumstance which has occasioned its being called in several languages, *Red-winged Thrush*.

Its ordinary cry is *tan, tan, kan, kan* ; and when it perceives a fox, its natural enemy, it leads him off to a great distance ; as do also the Blackbirds, repeating always the same notes. Most naturalists remark that it never sings ; but this assertion needs to be qualified, and we can only say that it is seldom heard to sing in countries where it does not appear in the season of love, as in France, England, &c. An excellent observer, M. Hebert, has informed me, that he has witnessed its chanting in the spring in Brie ; twelve or fifteen of them sat on a tree and warbled like linnets. Another observer, who lives
in

in the south of Provence, tells me, that the Red-Wing only whistles, which it does incessantly; we may infer, therefore, that it does not breed in that country.

Aristotle mentions it by the name of *Ilían Thrush*, as being the smallest and the least spotted of the Thrushes *. This epithet seems to imply that it was brought into Greece from the coasts of Asia, where once stood *Ilium*, the city of Troy.

I have traced an analogy between this species and the Fieldfare. They are both foreign, and only visit our climate twice a year †; they assemble in numerous flocks at certain hours to chirp together; they are similarly marked with speckles on the breast. But the Red-Wing is also related to the Throstle; its flesh is not inferior in quality, the under-surface of its wing is yellow, but more lively indeed, and of an orange tinge; it often occurs single in the woods, and visits the vineyards, like the Throstle, with which Lottinger has observed it often to fly in company, especially in the spring. From the whole it appears that this species is furnished with the means of subsisting of the other two,

* Aristotle, *Hist. Anim.* lib. ix. 20.

† In natural History, as in many other subjects, general observations always admit of exceptions. Though for the most part the Red-Wing does not spend the winter in our climates; I am assured by M. Hebert, that he killed one year in a hard frost several dozens on a white-thorn, which was still loaded with its berries.

and that in many respects it may be regarded as forming the shade between the Throstle and the Fieldfare. [A]

[A] Specific character of the *Turdus Iliacus* :—" Its wings are " ferruginous, its eye-lids whitish." It is smaller than the Fieldfare, and nearly nine inches long. It breeds in the north of Europe, in hedges and bushes, and lays six eggs of a bluish green, spotted with black.

M

FOREIGN BIRDS, WHICH ARE RELATED TO THE THRUSHES AND BLACKBIRDS.

I.

The BARBARY THRUSH*.

La Grive Bassette de Barbarie, Buff.

Turdus Barbaricus, Gmel.

The Greek Thrush, Shaw.

IT resembles the Thrushes in its general shape, in its bill, and the streaks on its breast dispersed regularly upon a white ground; in short, by all the exterior characters, except its legs and its wings. Its legs are not only shorter, but stronger; in which it is opposite to the *Hoamy*, and seems to resemble somewhat our Mistle, which has its legs shorter in proportion than the other three species. With regard to the plumage, it is extremely beautiful: the prevailing colour on the upper-part of the body, including the head and the tail, is a light brilliant green, and the rump is tinged with a fine yellow, as also the extremity of the coverts of the tail and

* Termed *Bassette*, on account of its short legs.

of the wings, of which the quills are of a less vivid colour. But this enumeration of the colours, were it even more complete, will by no means give a just idea of the effect which they produce in the bird itself; a pencil, and not words, can exhibit its beauty. Dr. Shaw, who saw this Thrush in its native country, compares its plumage to that of the richest birds of America; he adds, that it is not very common, and appears only in the season when the figs are ripe. This would shew that these fruits direct its migration, and in this single fact I perceive two analogies between this bird and the Thrushes; both birds of passage, and both excessively fond of figs*.

* Specific character of the *Turdus Barbaricus*:—"It is green, its breast spotted with white; its rump, and the tip of its tail, yellow."

II.

The RED-LEGGED THRUSH.

Le Tilly, ou La Grive Cendrée d'Amerique, Buff.

Turdus Plumbeus, Linn. and Gmel.

Merula Americana Cinerea, Briss.

Turdus Thilius, Molin.

Merula Tilli, Feuillee.

All the upper-part of the body of this bird, its head and neck, are of a deep ash-colour; which

which extends over the small coverts of the wings, and, passing under the body, rises on the one hand as far as the throat, without suffering any change; and, on the other, descends to the lower belly, shading however gradually into white, which is also the colour of the coverts under the tail. The throat too is white, but dappled with black; the quills and the great coverts of the wings are blackish, and edged exteriorly with cinereous. The twelve quills of the tail are tapered and blackish, like those of the wing, but the three outer ones on each side are terminated by a white spot, which is the larger, the nearer it is to the margin. The iris, the orbits, the bill, and the legs, are red; the space between the eye and the bill black, and the palate tinged with a vivid orange.

The total length is about ten inches; its alar extent near fourteen, its tail four, its leg eighteen lines, its bill twelve, its weight two ounces and a half; lastly, its wings when closed do not reach the middle of the tail.

This bird is subject to variety; for in the one observed by Catesby, the bill and throat were black. May we not ascribe this difference of colours to sex? Catesby only says that the male is a third smaller than the female; he adds, that these birds feed on the berries of the tree which produces gum elemi.

It is found in Carolina, and, according to Brisson, it is very common in the islands of Andros and Ilathera.

III.

The SMALL THRUSH of the Philippines.

Turdus Philippensis, Gmel.

The Philippine Thrush, Lath.

We owe this to Sonnerat. The fore-part of its neck and breast are dappled with white upon a rufous ground; the rest of the lower-part of the body is dirty white, bordering on yellow, and the upper-part of the body is of a deep brown, with an olive tinge.

The size of this bird is inferior to that of the Red-Wing; we cannot ascertain its alar extent, since the wing-quills in the specimen which we have observed are incomplete.

IV.

The HOAMY of China.

Turdus Sinensis, Linn. and Gmel.

The Chinese Thrush, Lath.

Brisson is the first who has described this bird, or rather the female of it. This female is somewhat

what smaller than a Red-Wing, which it resembles as well as the Thrortle; and still more the Canada Thrush, its legs being proportionably longer than in the other Thrushes; they are yellowish, as is the bill; the upper-part of the body is of a brown, bordering upon rufous, the under of a light and uniform rufous; the head and neck are striped longitudinally with brown; the tail is also of the same colour, only barred transversely.

Such is nearly the description of the external appearance of this bird; but we are not informed with regard to its instincts and habits. If it be really a Thrush, as it is said, its breast is like that of the Red Thrush, not dappled.

V.

The LITTLE THRUSH of St. Domingo.

This Thrush is, in point of smallness, like the American Thrush; its head is ornamented with a sort of crown or cap of bright orange, verging upon red.

The specimen figured by Edwards, Pl. 252, differs from ours in not being dappled under the belly. It was caught in November 1751, at sea, eight or ten leagues off the island of St. Domingo; which led Edwards to suppose that it was one of those birds of passage which every year

year leave the continent of North America on the approach of winter, and depart from the Cape of Florida in quest of milder seasons. This conjecture was verified. Bartram informed Edwards, that these birds arrived in Pennsylvania in the month of April, and remained there during the whole summer. He added, that the female built its nest on the ground, or rather in heaps of dry leaves, where it formed a sort of excavation; that it lined it with grass, and always chose the slope of a hill facing the south, and that it layed four or five eggs spotted with brown. Such differences in the colour of the eggs, in that of the plumage, and in the mode of nestling, seem to point at a nature distinct from that of our European Thrushes.

VI.

The LITTLE CRESTED OUZEL of China.

I place this bird between the Thrushes and the Ouzels, or Blackbirds, because it has the port and the ground colours of the Thrushes, but without the dapples, which we may consider in general as the distinctive character of that genus. The feathers on the crown of the head are longer than the rest; and the bird can erect them into a crest. It has a rose-colour
mark

mark behind the eye; another more considerable of the same colour, but not so bright, under the tail; and its legs are of a reddish brown. Its size is nearly that of the Lark, and its wings, which when displayed extend ten inches, scarcely reach, when closed, to the middle of the tail. The tail consists of twelve tapered quills. Brown more or less deep is the prevailing colour of the upper-part of the body, including the wings, the crest, and the head, but the four lateral quills on either side of the tail are tipped with white. The under-part of the body is of this last colour, with some tints of brown over the breast. I must not forget two blackish streaks, which, rising from the corners of the bill, and extending over a white ground, make a kind of mustachoe, which has a remarkable effect.

The MOCKING BIRDS.

Les Moqueurs, Buff.

EVERY remarkable bird has always many names, but if it be at the same time a native of a foreign climate, this embarrassing multitude, disgraceful to Natural History, is increased by the confusion of species. Such is the case with the American Mocking Birds. It is easy to perceive that Brisson's Mocking Bird, and the Cinereous Blackbird of St. Domingo, *Pl. Enl.* No. 558, both belong to the same species, the only difference being that the former has somewhat less of the gray colour in the under-side of the body than the latter. It will also appear, from comparison, that Brisson's Blackbird of St. Domingo is likewise the same, distinguished only by some lighter or deeper tints on its plumage and its tail-quills, which are hardly at all tapered. In like manner we shall find that the *Tzonpan* of Fernandez is either the female of the *Cencontlatōlli*, that is, of the Mocking Bird, as Fernandez himself suspects, or at least a permanent variety of that species*.

* *Historia Avium Novæ Hispaniæ*, cap. xx.—Nieremberg calls it *Tzanpan*, *Hist. Nat. lib. x. cap. 77.*; and Edwards, *Tzau-pan*.

It is true that its plumage is less uniform, being mixed above with white, black, and brown, and below with white, black, and cinereous; but the fundamental colour is the same, as also its size, its general shape, its song, and climate. We may say the same of the *Tetzonpan* and *Centzonpantli* of Fernandez *; for in the short mention which that author has made of it, features of analogy are to be met with in size, in colour, and in song, and no instance of disparity occurs. Besides, the resemblance between the names *Tzonpan*, *Tetzonpan*, *Centzonpantli*, seems to shew that they mark a single species, and that the diversity has arisen from the mistake of the transcriber, or the difference of the Mexican dialects.—Lastly, we can scarcely hesitate to admit among the species the bird, called by Brisson the *Great Mocking Bird*, and which he says is the same with Sloane's Mocking Bird, though, according to the dimensions given by Sloane, this is the smallest of the kind; but Sloane regards it as the *Cencontlatolli* of Fernandez, which Brisson makes his ordinary Mocking Bird. But Brisson has himself, without perceiving it, admitted the position which I hold; for he quotes two passages from Ray, which applied to the same bird, and refers one to his great, and the other to his small species. The only difference between the two is, that the great Mocking Bird has a

* Cap. cxv.

somewhat browner plumage, and longer legs * ; and its describers have taken no notice of its tapered tail.

After this reduction, there remains only two species of Mocking Birds, *viz.* The French Mocking Bird and the Ordinary Mocking Bird. I shall treat of them in the order I have named them, as it is nearly that of their relation to the Thrushes.

The FRENCH MOCKING BIRD.

Turdus Rufus, Linn. Gmel. and Klein.

Turdus Carolinensis, Briss.

Fox-coloured Thrush, Catesby, and Penn.

The Ground Mocking Bird, Lawson.

The Ferruginous Thrush, Lath.

None of the American Mocking Birds resembles so much our Thrushes in the speckles on the breast, as this ; but it differs widely from them in the proportions between the tail and wings ; these ending, when closed, almost where the tail begins. The tail is more than four inches long, which exceeds the third of the whole length of the bird, that being only eleven

* The expression of Sloane is somewhat ambiguous ; he says that its legs and feet are an inch and three quarters long. Does he mean the leg with the tarsus, or the tarsus with the toes ? Brisson understood it to signify the tarsus alone. (This last is certainly the usual meaning of the *leg* of a bird in English, and accordingly we have translated the French *piéd* by *leg*. Fr.)

inches. Its size is intermediate between that of the Miffel and the Fieldfare. Its eyes are yellow, its bill blackish, its legs brown, and all the upper-part of the body of a fox colour, but with a mixture of brown. These two colours also predominate on the wing-quills, though separately; the rufous on the outer webs, the brown on the inner. The great and middle coverts of the wings are tipped with white, which forms two streaks that cross the wings obliquely.

The under-side of the body is dirty white, spotted with a dusky brown, but these spots are more straggling than in our Thrushes: the tail is tapered somewhat drooping, and entirely rufous. The song of the French Mocking Bird has some variety, but not comparable to that of the proper Mocking Bird.

It feeds commonly on a kind of black cherries, which are very different from those of Europe, since they hang in clusters. It remains all the year in Carolina and Virginia, and consequently is not, at least in those provinces, a bird of passage:—another analogous circumstance to our Thrushes*.

* Specific character of the *Turdus Rufus*:—"It is rufous, below partly spotted with white, its wing-quills of an uniform colour, its tail rounded and rufous." It inhabits North-America; appears in New-York in May, and retires southwards in August. It builds in low bushes, and lays five eggs, thick spotted with ferruginous. It is much inferior in the variety of its notes to the true Mocking Bird.

The MOCKING BIRD.

Turdus Polyglottus, Linn. and Gmel.

Mimus Major, Briss.

The American Nightingale, Song Thrush, or Gray Mocking Bird,
Sloane.

The Mocking Bird, Catelby.

The Mimic Thrush, Penn. and Lath.

We have here a striking exception to the general remark made by travellers, that in proportion as the plumage of the birds in the New World are rich, elegant, and splendid, so their notes are harsh, raucous, and monotonous. The Mocking Bird is, on the contrary, if we believe Fernandez, Nieremberg, and the native Americans, the sweetest chorister of the feathered race, not excepting the Nightingale. It equals that charming bird in the melody of its song; but it possesses besides the power of imitating the cries of other animals: hence is derived its name. Nor is it satisfied with barely re-echoing the sounds. It gives them softness and grace. Accordingly the savages have bestowed upon it the appellation of *cencontlatolli*; that is, four hundred languages; and the learned have employed the epithet *polyglot*. But the Mocking Bird mingles action with its song, and its measured movements accompany and express the succession of its emotions. Its prelude is to rise slowly with expanded wings, and soon
sink

sink back to the same spot, its head hanging downwards. Its action now corresponds with the varied nature of its music. If the notes are brisk and lively; it describes in the air a number of circles crossing each other; or it ascends and descends continually in a spiral line. If they are loud and rapid, it with equal briskness flaps its wings. Is its song unequal? it flutters, it bounds. Do its tones soften by degrees, melt into tender strains, and die away in a pause more charming than the sweetest melody? it gently diminishes its action, glides smoothly above its tree, till the wavings of its wings begin to be imperceptible, at least cease, and the bird remains suspended and motionless in the air.

The plumage of this American Nightingale by no means corresponds with the beauty of its song; the colours are very ordinary, and have neither brilliancy nor variety. The upper-side of the body is a grayish brown; the upper-side of the wings and of the tail are still of a deeper brown; only it is interrupted, 1. on the wings by a white mark which crosses it obliquely near the middle of its length, and sometimes a few small white speckles are scattered on the fore-part. 2. On the tail by an edging of the same white colour; and lastly, on the head with a circle of the same, which forms a sort of crown*, and extending over the eyes appears like two distinct eye-lids. The under-side of the body

* Fernandez.

is white from the throat as far as the end of the tail. We perceive in the figure given by Edwards a few dapples, some on the sides of the neck, and others on the white of the great coverts under the wings.

The Mocking Bird approaches the Red-Wing in size; its tail is somewhat tapered *, and its feet are blackish; its bill is of the same colour, and with long bristles that grow above the angles of its opening; lastly, its wings are shorter than those of our Thrushes, but longer than those of the French Mocking Bird.

It is found in Carolina, Jamaica, New Spain, &c. It in general loves the hot climates, but can subsist in the temperate. In Jamaica it is very common in the savannas of the woody parts of the island; it perches on the highest branches, and chants its song. It often builds its nest on the ebony trees. Its eggs are spotted with brown. It feeds on cherries and the berries of the white-thorn and cornel tree †, and even on insects. Its flesh is esteemed excellent. It is not easily raised in a cage; but this may be accomplished by care and kind treatment. It is besides a familiar bird, which seems to be fond of man, approaches his dwellings, and even perches on the chimney tops.

In the subject which Sloane dissected, the stomach was a little muscular, the liver whitish, and

* This appears not in Sloane's figure.

† The Dogwood, *Cornus Florida*, Linn.

the intestines were folded in a vast number of circumvolutions. [A]

[A] Specific character of the American Mocking Bird, *Turdus Polyglottus*, LINN.—“ It is of a dull ash-colour, below pale-ash, the “ primary wing-quills white in their outer half.” In the northern provinces of America, as New-York, they appear only during the summer. In the warmer parts of the continent they sing incessantly, by night and day, from March to August. They often breed in fruit-trees, but are shy during the time of incubation. They lay five or six eggs, which are blue, thickly spotted with rufous.

There is a smaller kind of Mocking Bird, which has obtained the following appellations from naturalists :

Turdus Orpheus, Linn. and Gmel.

Mimus, Briss.

Avis Polyglotta, Will.

The Lesser Mocking Bird, Edw.

The Mocking Thrush, Lath.

Its specific character :—“ Its back is dusky, its breast and its “ lateral tail-quills are whitish, its eye-brows white.”

M

The B L A C K B I R D *.

Le Merle, Buff.

Turdus Merula, Linn. and Gmel.

Merula, Belon, Gesner, Briss. &c.

THE adult male of this species is of a deeper and purer black than the Raven, and hence its English name. Indeed, except the orbits, the talons, and the sole of the foot, which have always a yellow cast, it is entirely black in every position. In the female, on the contrary, the same decided black is not spread through the whole of the plumage; it is mixed with different shades of brown, ferruginous, and gray, the bill is but seldom yellow, and the song is different from that of the male;—all these circumstances combined have made it be mistaken for a bird of another species.

The Blackbirds are distinguished from the Thrushes not only by the colour of their plumage, and the different livery of the male and of the female, but by their song and their natural habits. They never fly in flocks like the

* In Greek, *Κορσυφος*, or *Κορσυδος*, also *Κορσυχος*; the Latin name *Merula* is derived by Varro from *Mera*, (*mere*, *alone*, *solitary*,) which denotes the retired disposition of the bird: in Italian, *Merlo*: in Spanish, *Merla*: in Portuguese, *Melroa*: in German, *Schwarze Amsel* (Black Ouzel): in Flemish, *Merlaet*, *Meerel*: in Swedish, *Kobl-trost*: in Danish and Norwegian, *Solfort*.



THE BLACKBIRD.

Thrushes, and though they are more savage with regard to each other, they are less so with regard to man; for they are more easily tamed, and live nearer the hamlets. They are also reckoned very crafty, because they have a quick sight to descry the fowler at a distance, and shun his approach. But if we study their nature more closely, we shall find that they are more restless than cunning, more timorous than suspicious, since they allow themselves to be caught with bird-lime, with nooses, and with all sorts of snares, provided the hand which sets these be concealed.

When they are shut up with other birds, their natural inquietude degenerates into petulance; they pursue and continually harass their companions in slavery; and for that reason they cannot be admitted into voleries, where several kinds of small birds are kept.

They may be raised apart for the sake of their song; not indeed on account of their natural music, which is hardly tolerable except in the fields, but because they have a facility of improving their notes and of learning others, of imitating tones of different instruments*, and even the human voice†.

As the Blackbirds, like the Thrushes, early engage in love, they soon begin to warble; and

* Olina, *Uccelliera*, p. 29.

† Olina. *Ibid.*—Philostrat. *Vita Apollonii*, lib. vii.—Gefner, *De Avibus*, p. 606.

as they have more than one hatch, they chant before the vernal warmth, and continue their strain when the other songsters of the grove droop in silence. This circumstance has led some to fancy that they never suffer any change of plumage; but such a supposition is neither true nor probable*. They are found in the woods, towards the end of the summer, in moult, some having their head entirely bald: Olina and the author of the British Zoology say, that, like the other birds, it is silent during that time; the latter adds, that sometimes it renews its song in the beginning of winter, but most commonly it has in that season only a harsh discordant cry.

The ancients pretended that in winter its plumage changed into rufous†; and Olina, one of the moderns the best acquainted with the birds which he describes, says, that this happens in autumn: whether it be because this alteration of colour is the effect of moulting, or that the females and the young Blackbirds, which really incline to rufous rather than to black, are then more numerous and oftener seen than the adult males.

These birds make their first hatch in the end of winter; it consists of five or six eggs of a bluish green, with frequent and indistinct spots.

* “The blackbirds, thrushes, and flares, lose not their feathers.” PLINY, lib. x. 24.

† Ibid, lib. x. 29.

of a rust colour. This first hatch seldom prospers, because of the severity of the weather; the second succeeds better, though it is only of four or five eggs. The Blackbirds nest is constructed nearly like that of the Thrushes, except that it is lined with a matting. It is commonly placed in bushes or trees of a moderate height. They would seem naturally disposed to place it near the ground; and experience alone of the danger of such a situation instructs them to give it some elevation*. A nest was brought to me only once, which had been found in the trunk of a hollow pear-tree.

Moss, which always occurs on the trunk, and mud, which is to be found at the foot of the tree, or in its neighbourhood, are the materials that form the body of the nest. Stalks of grass and small roots are the softer substances with which they line it; and they labour with such assiduity that in eight days they complete the work. The female hatches alone, and the male is no farther concerned than in providing her subsistence. The Author of the *Treatise on the Nightingale* affirms, that he has seen a young Blackbird of the same year, but already strong, cheerfully engage in rearing the infant

* "I have diligently examined a nest found near the ground "in a place overgrown with thorns." GÉSNER.—A Blackbird observing that a cat ate its two first hatches in its nest at the bottom of a hedge, made a third on an apple-tree, eight feet high. SALERNE.

brood of its own species; but he does not inform us of its sex.

I have remarked that the young drop their feathers more than once the first year; and that, at each time, the plumage of the male becomes blacker, and the bill yellower, beginning at its base. With regard to the females, they retain, as I have said, the colours of infancy, as they also retain most of its qualities. However, the inside of their mouth and throat is yellow, like the males; and in both may be perceived a frequent motion of the tail upwards and downwards, with a slight shudder of the wings, accompanied by a feeble broken cry.

These birds do not leave the country in winter *, but choose situations the best sheltered, settling commonly in the thickest woods, especially when these are supplied with perennial springs, and consist of evergreens, such as pines, firs, laurels, cypresses, myrtles, junipers, which both afford them subsistence, and protect them from the rigour of the season. They sometimes seek for cover and food in our gardens.

* Many people assert that they leave Corsica about the 15th of February; and return not till October; but M. Artier, Royal Professor of Philosophy at Bastia, doubts the fact, because in that island they can always enjoy the proper temperature; in cold weather in the plains, and in the sultry seasons in the mountains. He adds, that there is always abundance of food, berries of all kinds, grapes, and particularly olives, which in Corsica are not entirely gathered till the end of April. Lottinger believes that the males pass the winter in Lorraine, but that the females remove to a little distance in severe weather.

The wild Blackbirds feed on all sorts of berries, fruits, and insects; and as no country is so sterile as not to afford some of these, and as the Blackbird is reconciled to all climates, it is found in almost every part of the world, but varying according to the impressions which it receives.

Those which are kept in the cage, eat flesh also, either dressed or minced, bread, &c. but it is said that the kernels of pomegranates prove poisonous to them as to the Thrushes. They are very fond of bathing, and they must have plenty of water in the voleries. Their flesh is good, and not inferior to that of the Missel or the Fieldfare, and seems even to be preferred to that of the Throstle and of the Red-Wing, in countries where it can require a succulence from the olives, and a perfume from the myrtle-berries. The birds of prey are as fond of feasting on them as man, and commit an equal havoc without that their multiplication would be excessive. Olina fixes their period of life at seven or eight years.

I dissected a female, which was taken on its eggs about the 15th of May, and which weighed two ounces and two gros. In the *ovarium* was a cluster consisting of a great number of unequal sized eggs; the largest two lines in diameter, and of an orange colour; the smallest were of a lighter colour, and of a substance less opaque, and about one-third of a line in diameter. Its bill

bill was quite yellow, also the tongue and the whole inside of the mouth, the intestinal tube seventeen or eighteen inches long, the gizzard very muscular, and preceded by a bag formed by the dilatation of the *œsophagus*; the gall bladder oblong, and the *cæcum* wanting. [A]

[A] Specific character of the Blackbird, *Turdus Merula*:—"It is black, its bill and eyelids are yellow." It builds earlier than any other bird; its nest is formed with moss, withered grass, leaves, &c. lined with clay, over which is spread some hay.

M

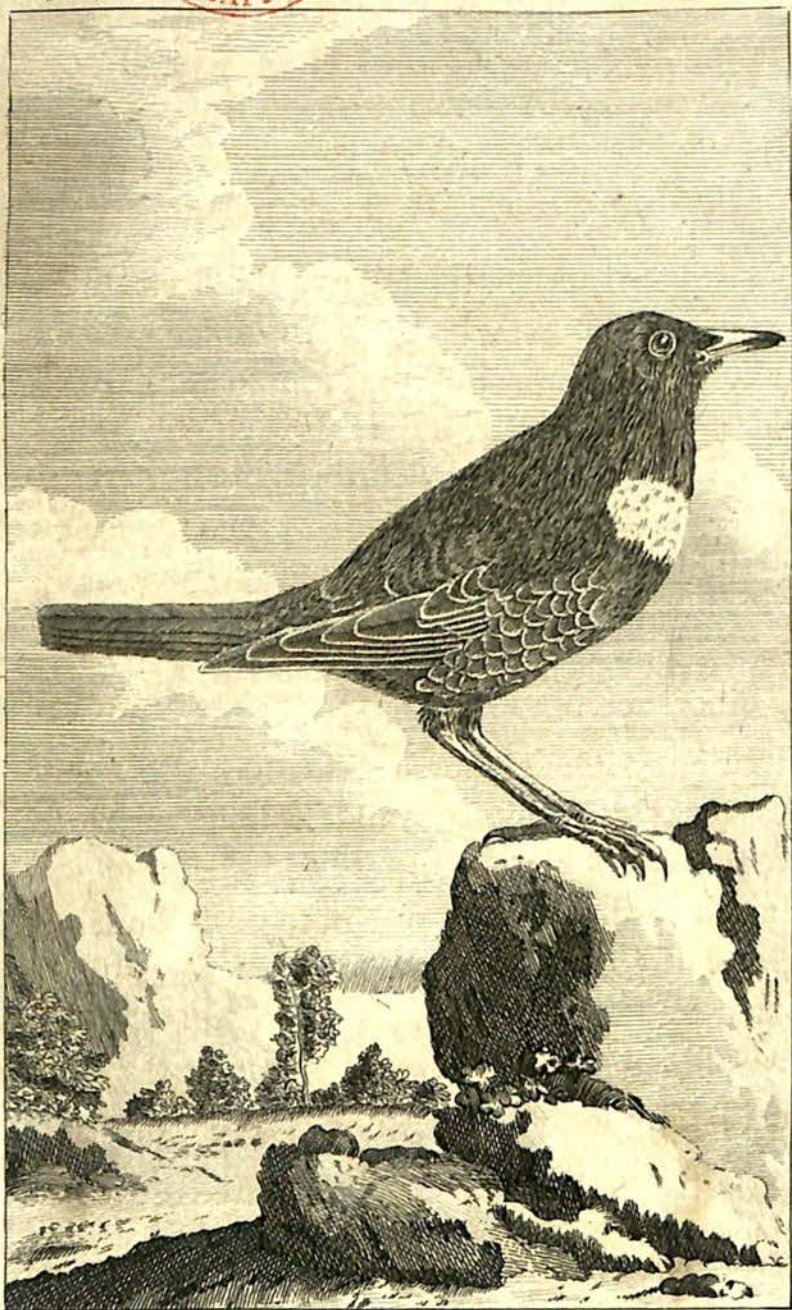
VARIETIES of the BLACKBIRD.

THOSE THAT ARE WHITE, OR SPOTTED WITH WHITE.

The plumage of the Blackbird is subject, like that of the Raven, the Crow, the Jackdaw, and other birds, to great changes, from the influence of the climate, or from the action of less obvious causes. In fact, white seems to be in most animals, what it is in many plants, the colour into which all the others, and even the black, degenerate by a quick transition, and without passing through the intermediate shades.

The only varieties of this sort which appear to belong to the common Blackbird, are, 1. the White one, which was sent to Aldrovandus at Rome; and, 2. the White-headed one of the same author. Both these have the yellow bill and feet of the ordinary species.

N^o 77



THE RING-OUZEL .

The RING OUZEL*.

Le Merle a Plastron Blanc, Buff.

Turdus Torquatus, Linn. and Gmel.

Merula Torquata, Briss. Ray, and Will.

THIS species is marked above the breast with a horse-shoe, which, in the male, is of a very bright white, but in the female is of a dirty tawny colour; and as the rest of the female's plumage is a rufous brown, the horse-shoe appears much less distinct, and is sometimes entirely obscured †. Hence some nomenclators have imagined that the female belonged to a particular species, which they termed *The Mountain Blackbird*.

The Ring Ouzel much resembles the common Blackbird; the ground colour of their plumage is black, the corners and the inside of, their bill yellow; they are nearly of the same size and the same port: but the former distinguished by the horse-shoe, by the white enamel of its plumage, chiefly on the breast, belly, and wings ‡; by its bill, which is shorter and not

* In Italian, *Merula Alpestro* (or Crag Blackbird): in German, *Ring-Amsel*, *Rotz-Amsel* (snotty, or filthy Ouzel, because it feeds sometimes on the maggots found in horse-dung): *Wald-Amsel* (Wood Ouzel): *Stein-Amsel*, *Berg-Amsel* (Mountain Ouzel): *Schnee-Amsel* (Snow Ouzel).

† WILLUGHBY.

‡ Willughby saw at Rome one of these birds, which had its horse-shoe gray, and all its feathers edged with the same colour. He judged it was a young bird, or a female.

so yellow; by the shape of the middle-quills of the wings, which are square at the end, with a small projecting point in the centre, formed by the extremity of the shaft; lastly, by its cry*, which is different, as also its habits and dispositions. It is a real bird of passage, though its route cannot be precisely traced. It follows the chain of the mountains, but does not keep in any certain track†. It seldom appears in the neighbourhood of Montbard, except in the beginning of October, when it arrives in small bodies of twelve or fifteen, and never in larger numbers. These seem to be a few families that have straggled from the great body; they seldom stay more than two or three weeks, and on the slightest frost entirely disappear. But I must own that Klein informs us that these birds were brought to him alive in winter. They repass about April or May, at least in Burgundy, Brie‡, and even in Silesia and in Frisia, according to Gefner.

It is uncommon for the Ring Ouzels to inhabit the plains in the temperate part of Europe;

* This cry in autumn is *crr, crr, crr*: but a person of veracity assured Gefner, that he heard this Ouzel sing in the spring, and very agreeably.

† It does not appear every year in Silesia, according to Schwenckfeld: this is also the case in certain cantons of Burgundy.

‡ M. Hebert assures me that in Brie, where he has fowled much at all seasons, he killed a great number of these Ouzels in the months of April and May, and that he never chanced to meet with any in the month of October. In Burgundy, on the contrary, they seem less rare in autumn than in spring.

yet

yet Salerne affirms that their nests have been found in Sologne and in the forest of Orleans; that these nests were not constructed like those of the ordinary Blackbird; that they contained five eggs of the same size and colour (a circumstance different from what happens in the Blackbirds); that these birds breed in the ground at the foot of bushes, and hence probably they are called *Bush-Birds* or *Terrier Blackbirds* *. Certain it is that in some seasons of the year they are very frequent on the lofty mountains of Sweden, of Scotland, of Auvergne, of Savoy, of Switzerland, of Greece, &c. It is even probable that they are spread in Asia, and in Africa as far as the Azores; for this species, so social, so fond of dwelling in mountains, and having its plumage marked with white, corresponds well to what Tavernier says of the flocks of Blackbirds which pass from time to time on the frontiers of Media and Armenia, and rid the country of grasshoppers. It also agrees with the account which Adanson gives of those Blackbirds spotted with white, which he saw on the summits of the mountains in the island of Fayal, keeping in flocks among the arbutes, on the fruit of which they fed, chattering continually †.

Those which ramble in Europe subsist likewise on berries. Willughby found in their sto-

* *Mesles Terriers, ou Bouiffonniers.*

† *Noyage au Sénégal.*

mach vestiges of insects, and berries resembling gooseberries; but they prefer those of ivy and grapes. It is in the season of vintage that they are generally so fat, and their flesh so savoury and succulent.

Some fowlers say that the Ring Ouzels attract the Thrushes; they remark too that they allow themselves to be more easily approached than the common Blackbirds, though they are more difficult to decoy into snares.

I found, on dissection, that their gall-bladder is oblong, very small, and consequently quite different from what Willughby describes it to be; but the situation and form of the soft parts, it is well known, are very subject to vary in animals. The ventricle was muscular, its inner coat wrinkled as usual, and inadhesive. In this membrane I saw fragments of juniper berries and nothing else. The intestinal canal, measured between its two extreme orifices, was about twenty inches; the ventricle or gizzard was placed between the fourth and fifth of its length. Lastly, I perceived some traces of *cæcum*, of which one appeared to be double. [A]

[A] Specific character of the Ring-Ouzel, *Turdus Torquatus*, LINN.—“It is blackish, with a white collar, its bill yellowish.” It is larger than the Blackbird, being eleven inches long and seventeen broad. It inhabits the mountainous parts of this island in small bodies of five or six.

The *Merula Saxatilis*, or the Rock Ouzel, is reckoned by Latham the young of the Ring-Ouzel, from which it differs, chiefly by the dulness of its colours.

VARIETIES *of the* RING-OUZEL.

I.

THOSE WHICH ARE WHITE, OR SPOTTED WITH WHITE.

Aristotle was acquainted with White Ouzels, and made them a distinct species, though they have the same song and the same bulk with the common Ouzel or Blackbird; but he knew that their instincts were different, since they preferred the mountains*: and these are the only distinctive characters which Belon admits†. They are found not only in the mountains of Arcadia, of Savoy, and of Auvergne, but also in those of Silesia, and among the Alps and Appennines, &c.‡. They are also birds of passage, and migrate with the Ring-Ouzel at the same season. The white colour of the horse-shoe in the Ring-Ouzel may extend over the rest of the plumage. I should therefore conceive that these, though usually referred to the Blackbirds, belong really to the Ring-Ouzels. In the white one which I observed, the quills of the wings and tail were whiter than any of the rest, and the upper-part of the body, except

* “They are frequent about Cyllene in Arcadia, and breed nowhere else”. *Hist. Anim.* lib. ix. 19.

† He says expressly that the White Ouzel never descends into the plains.

‡ WILLUGHBY.

the top of the head, was of a lighter gray than the under. The bill was brown, with a little yellow on the edges; there was also yellow under the throat and on the breast, and the legs were of a deep gray brown. It was caught in the vicinity of Montbard in the beginning of November before the frost; that is, at the exact time of the passage of the Ring-Ouzel; for a few days before, two of that species were brought to me.

In those which are spotted, the white is combined variously with the black; sometimes it is confined to the quills of the wings and tail, which are commonly supposed to be least subject to change of colour*; sometimes it forms a collar that encircles the neck, but is not so broad as the white horse-shoe of the Ring-Ouzel. This variety did not escape Belon, who says that he saw in Greece, in Savoy, and in the valley of Maurienne, a great number of collared Black-birds, so called on account of a white line which bent quite round the neck. Lottinger, who had an opportunity of observing these birds in the mountains of Lorraine, where they sometimes breed, informs me, that they commence breeding very early; that they construct and place their nest nearly like the Thrush; that the education of their young is completed before the end of June; that they retire every year, but that the time of their departure is not fixed; that this usually be-

* ALDROVANDUS.

gins about the end of July, and lasts the whole of August, during which time not one is seen in the plain, a proof that they follow the chain of the mountains, but their retreat is uncertain. Lottinger adds, that this bird, which formerly was very common in the Vosges, is now seldom found there.

II. The GREAT MOUNTAIN OUZEL.

It is spotted with white, has no horse-shoe, and is larger than the Mistle. It arrives in Lorraine about the end of autumn, and is then excessively fat. The bird-catchers seldom succeed with it; it feeds upon snails, and is dexterous in breaking the shells. When these fail, it subsists on ivy-berries. It is excellent eating; its strains, far inferior to those of the Blackbird, are harsh and dismal *.

* I am indebted for these facts to Dr. Lottinger.

M.

The ROSE-COLOURED OUZEL *.

Le Merle Couleur de Rose, Buff.

Turdus Roseus, Linn. and Gmel.

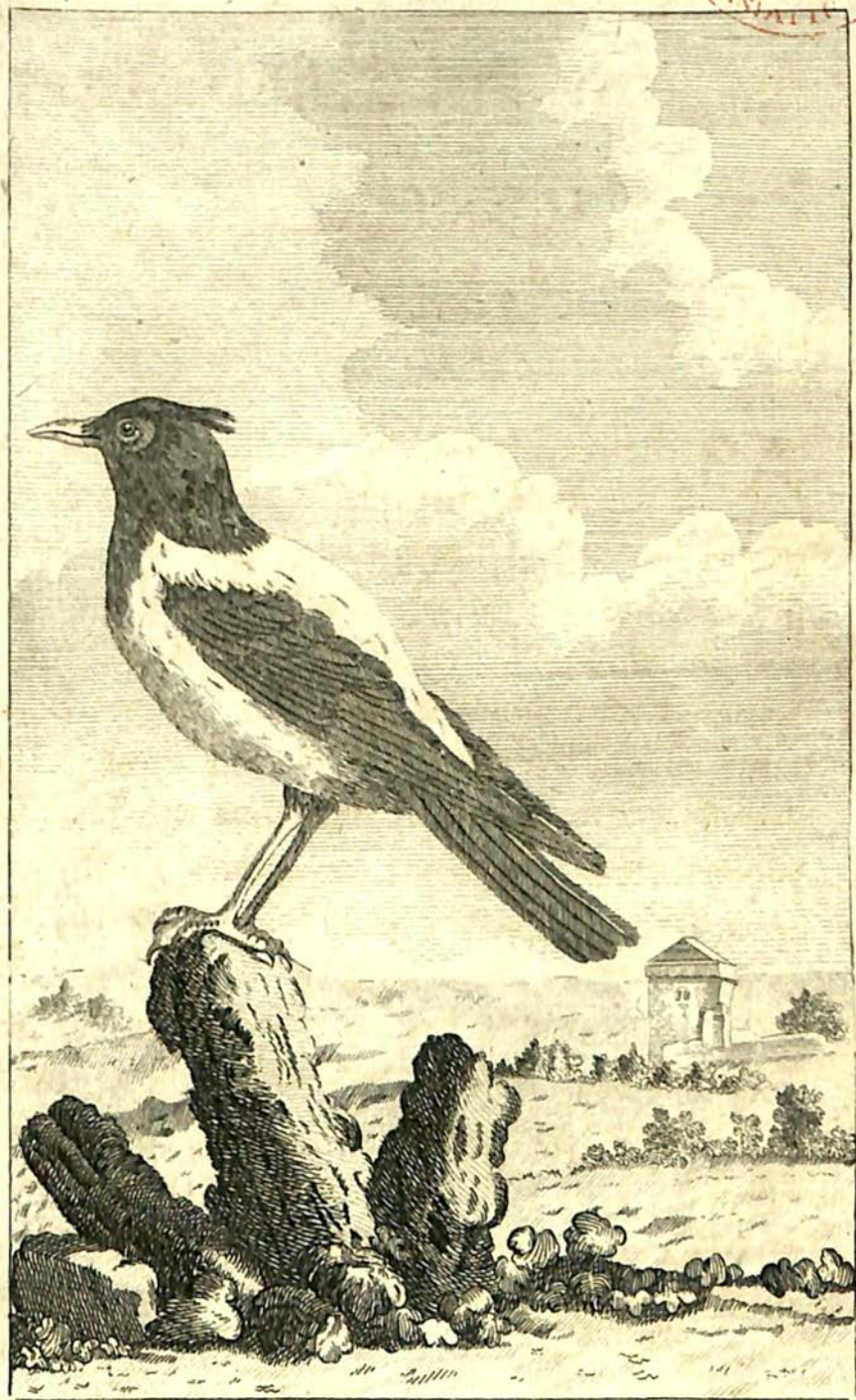
Merula Rosea, Briss. Ray, and Will.

Sturnus Roseus, Scopoli.

The Rose, or Carnation-coloured Ouzel, Penn.

ALL the ornithologists, who have taken notice of this bird, mention it as very rare, as foreign, and little known ; that it is seen only in its passage, and the country to which it belongs is uncertain. Linnæus tells us indeed, that it inhabits Lapland and Switzerland ; but he says nothing with regard to its instincts and mode of life. Aldrovandus, who first described this bird, only remarks that it appears sometimes in the plains near Bologna, where it is known by the bird-catchers under the name of *Sea-Stare*, (*Sterno Marino*) ; that it sits on the dung-hills, grows very fat, and is excellent eating. Two birds of this kind were found in England, and Edwards supposes that they were driven thither by the violence of the wind. We have observed several in Burgundy, which had been caught in their passage, and it is probable that they pursue their excursions as far as Spain, if what Klein says be

* In Spanish, *Tordos* ; in German, *Haarkopfige-Drossel*, (Hair-headed Thrush).



THE ROSE COLOURED THRUSH.

true, that they have a name in the Spanish language.

The plumage of the male is remarkable; its head and neck, and the quills of its wings and of its tail, are black, with brilliant reflexions which play between green and purple. The belly, the back, the rump, and the small coverts of the wings are of a rose colour, which has two tints, the one light, the other deep, with a few black spots scattered here and there on a kind of scapulary, which descends above as far as the tail, and below to the abdomen. Besides, its head is ornamented with a sort of crest which reclines like that of the Chatterer, and which must have a fine effect when the bird erects it.

The lower belly, the inferior coverts of the tail and the thighs are of a brown colour; the tarsus and the toes of a dirty orange; the bill partly black, and partly flesh-coloured. But the distribution of these colours seems not fixed in that part; for in the subjects which we have observed, and in those of Aldrovandus, the base of the bill was blackish, and all the rest of a flesh colour; whereas in those examined by Edwards, the point of the bill exhibited the black, which changed by degrees into a dirty orange on the base of the bill and on the legs. The under-side of the tail seemed marbled, the effect produced by the colour of its lower coverts, which are blackish and tipped with white.

In the female the head is black like that of the male, but not the neck, nor the quills of the tail and of the wings, which are of a lighter tinge; the colours of the scapulary are also less vivid.

This bird is rather smaller than the common Blackbird; its bill, wings, legs, and toes, are proportionably longer. In size, figure, and even instinct, it is much more analogous to the Ring-Ouzel, for it likewise migrates. However, we must own, that one of these Rose-coloured Ouzels, which was killed in England, kept company with yellow-billed Blackbirds. Its length, from the point of the bill to the end of the tail, is seven inches and three-quarters, and to the extremity of the nails seven and a half; its alar extent thirteen or fourteen, and its wings, when closed, reached almost to the middle of the tail. [A]

[A] Specific character of the *Turdus Roseus*:—"It is somewhat of a carnation colour, its head, its wings, and its tail, black; the back of its head crested." It very rarely appears in England. It annually resorts in great flocks about the river Don, where it breeds among the rocks. The *Turdus Seleucis* of Gmelin is really the same species, which in Syria obtains the name of *locust bird*. It visits Aleppo in the months of July and August in pursuit of the swarms of locusts; and hence the Turks regard it as somewhat sacred.



THE ROCK SHRIKE .

The ROCK BLACKBIRD *

Le Merle de Roche, Buff.

Turdus Saxatilis, } Gmel.
Lanius Infaustus, }

Merula Saxatilis, Ray, Will. and Briss.

The Greater Red-Start, Alb.

The Rock Crow, Penn.

THE name indicates sufficiently the haunts of this bird: it inhabits precipices and mountains; it is found in the wildest parts of Bugey; it sits commonly on the large stones, and constantly without cover; so that it is difficult to get near it with a fowling-piece, for as soon as it perceives the person, it removes to another place. Its shyness seems to be less owing to native wildness, than to its apprehensions of man, and its experience of his artifices. Nor is it so much exposed as many other birds to danger from that quarter. The loss of liberty alone is what it has to dread; for though excellent eating, it is more prized on account of its song, which is soft, varied, and much like that of the Pettychaps. It soon acquires the notes of other birds, and even learns our music. It begins by day-break, and welcomes the return of the morning; and it renews its strain with the setting sun. If during the night we go near its cage with a light, it

* In Italian, *Cadirosso Maggiore*, *Corossolo*, *Crofferone*: in German, *Stein-Roetel*, *Stein-Trostel*, *Stein-Reitling*.

immediately sings; and in the day-time, if it is not warbling, it seems humming and preparing new airs.

These birds conceal their nests with the utmost care, and build them in the holes of the rocks, and in the bottom of the most inaccessible caverns. It is with the greatest difficulty and hazard that we can scramble to these, which they defend with courage, darting at the eyes of their plunderers.

Each hatch contains three or four eggs. They feed their young with worms and insects, on which they live themselves. They can subsist however on other food, and when they are raised in a cage, it succeeds well to give them the same paste as the Nightingales. But they must be taken from the nest; for after they have flown, they cannot be enticed into any kind of snare; and if they be caught by surprise, they will never survive their liberty*.

The Rock Blackbirds are found in many parts of Germany, in the Alps; in the mountains of Tyrol, in those of Bugey, &c. I received a female of this species caught on its eggs the 12th of May; it had built its nest on a rock in the neighbourhood of Montberd, where these birds are very rare and quite unknown; its colours were not so bright as those of the male. This last is rather smaller than the common Blackbird, and entirely different in its proportions.

* FRISCH.

THE ROCK BLACKBIRD. 311

Its wings are very long, such as would suit a bird that nestles in the bottom of caverns; they measure thirteen or fourteen inches when expanded, and if closed they reach almost to the end of the tail, which is only three inches in length. The bill is about an inch.

With regard to the plumage, the head and neck are covered as it were with a cinereous cowl, variegated with small rusty spots. The back is darker near the neck, and lighter near the tail. The ten lateral quills of the tail are ferruginous, and the intermediate brown. The wing-quills and their coverts are of a dusky colour, and edged with a lighter tinge. Lastly, the breast, and all the lower-part of the body, orange, variegated with small speckles, some white, others brown; the bill and legs are blackish. [A]

[A] There are two kinds of Rock Blackbirds, or Ouzels; a greater and a lesser. The former has sometimes been denominated a Crow or Shrike. It is the *Turdus Infaustus* of Latham, who thus characterizes it: "It is blackish, variegated with dusky and tawny, its head spotted with cinereous tawny, its lateral tail-quills rufous." It is of the size of a Thrush, and occurs chiefly in Italy and the south of Europe.

The Lesser Rock Ouzel is the one whose habits are exhibited in the text. It is the *Turdus Saxatilis* of Latham. Its specific character: "Its head cœrulean; its tail ferruginous."

M

The BLUE OUZEL*.

Le Merle Bleu, Buff.*Turdus Cyanus*, Linn. and Gmel.*Merula Cærulea*, Briss.*Turdus Solitarius*, Klein.*Cyanos*, seu *Cærulea Avis*, Ray.*The Indian Mock-Bird*, Will.*The Solitary Sparrow*, Edw.*The Blue Thrush*, Lath.

THIS bird has the same ground colour with the Rock Blackbird; that is, a cinereous blue, without any mixture of orange; the same size, the same proportions nearly, the same taste for certain kinds of food, the same song, the same habit of settling on the summits of mountains, and of building its nest in the most craggy rocks. In short, we might be inclined to refer it to the same species. Accordingly, many naturalists have mistaken the one for the other. The colours of its plumage vary somewhat in the descriptions, and it is probably subject to real variations, arising from the difference of the individuals, that of age, of sex, of climate, &c. The male which Edwards has delineated, Pl. XVIII. was not of an uniform blue throughout; the tinge of the upper-part of the body was deeper

* In Italian, *Merlo Biavo*: in German, *Blau-Vogel*, *Blau-Stein-Amsel*, *Klein-Blau-Zimmer* (Little Blue Zimmer).

than



THE BLUE THRUSH.

than that of the lower; the quills of its tail blackish, those of its wings brown, and also the great coverts, which are edged with white; its eyes surrounded by a yellow circle, the inside of its mouth orange, its bill and legs of a brown verging on black. There would seem to be more uniformity in the plumage of the female.

Belon, who saw some of these birds at Ragusa in Dalmatia, tells us, that they are also found in the islands of Negropont, Candia, Zante, Corfu, &c.; that they are very much sought for, on account of their song; but he adds, that they do not inhabit France or Italy. However, the arm of the sea which separates Dalmatia from Italy is no insurmountable barrier, especially to these birds, which, according to Belon himself, fly much better than the common Blackbird, and which could at least make the circuit and penetrate into Italy by the State of Venice. Besides, it is a fact that these Ouzels are found in Italy; the one described by Brisson, and that figured in our *Pl. Enl.* No. 250, were both sent from that country. Edwards had learnt from current report that they nested on inaccessible rocks, or old deserted towers*, and he saw some which were

* M. Lottinger tells me of a Lead-coloured Ouzel which passes into the mountains of Lorraine in the months of September and October, which is then much fatter and better tasted than our common Blackbirds, but resembles neither the male nor the female of that species. As no description accompanied this note, I cannot decide whether it refers to the Blue Ouzel.

killed near Gibraltar; from which he infers, with great probability, that they are spread through the whole of the south of Europe. But this must be understood of the mountainous tracts, for it is rare to find them in the plains. They commonly lay four or five eggs, and their flesh, especially when they are young, is reckoned good eating*. [A]

* BELON.

[A] Specific character of the *Turdus Cyanus*:—"Its quills are blue-ash coloured at the margin, its mouth and eye-lids yellow." It is eight inches long, but smaller than the Blackbird.

M

The SOLITARY OUZEL*.

Le Merle Solitaire, Buff.

Turdus Solitarius, Linn. and Gmel.

Merula Solitaria, Briss.

Passer Solitarius, Ray.

The Solitary Thrush, Lath.

THIS also is an inhabitant of the mountains, and famous for its elegant strains. - It is well known that Francis I. king of France, took singular pleasure in listening to it; and even at present the male of this species is tamed and sold at a very high price at Geneva and Milan †, and still dearer at Smyrna and Constantinople. ‡. The native warble of the Solitary Ouzel is extremely liquid and tender, but rather plaintive, as must be the song of every bird which leads a lonely existence. It remains always single, except in the season of love. At that joyous period, the male and female not only associate to-

* It is probably the *Κορσυφος Βαιος*, or the Little Blackbird, of Aristotle, which resembled the Blackbird, only its plumage was brown, its bill not yellow, and it lodged among rocks or on roofs. In modern Greek, *Μερολα*: in Italian, *Passera Solitaria*; and also *Merulo Solitario*, *Saxatili*, *Stercoroso*, *Merlo Chiappa* (Buttock-Blackbird): in Turkish, *Kajabulbul*, which signifies Rock Nightingale; the Swedish *Sten-Naecktergabl* has the same meaning: in Polish, *Wrobel Ojebny*.

† Olina, Gesner, Willughby.

‡ It is sometimes sold in these cities for fifty or a hundred pistres, HASSELQUIST.

gether,

gether, but desert in company the wild and dreary heights where they had lived separately, and resort to the milder abodes of man. They seem to seek spectators of their pleasures, and come forward in those intoxicating moments, when other animals court the silence of retreat. But they lodge at a considerable height above the surface, and thus in the midst of population they shun the dangers to which they would be exposed. They build their nest with stalks of grass and feathers in the top of a separate chimney, or on the ruins of an old castle, or on the summit of a large tree; and almost always near a steeple or lofty tower. The male sits whole hours or days upon the vane or weather-cock, and soothes the tedious situation of his mate by a continual warble; but pathetic as are his strains, they are still insufficient to express the warmth and tenderness of his emotions. A solitary bird feels more delicately and ardently than others. Sometimes he rises chanting, flapping his wings, displaying the feathers of his tail, bristling those on his head, and panting with delight, he describes many circles in the air round his beloved mate as the centre.

If the female be scared by any uncommon noise, or by the sight of any new object, she retires into her fort, but soon returns to the nest, which she never abandons.

As soon as the young are hatched, the male ceases to sing, but not to love; he gives another
proof

proof of his affection by sharing in the trouble of rearing the brood, and bringing provisions in his bill. In animals the ardor of love is ever proportioned to the tenderness for the offspring.

They commonly lay five or six eggs; they feed their young with insects, on which, and on grapes, they subsist themselves*. They arrive in April in those countries where they pass the summer, and depart about the end of August; they return every year to the same spot where they first fixed their abode. It is uncommon to see more than two pairs settled in the same tract †.

The young, when they are taken out of the nest, are capable of instruction, and they learn to chant or to prattle. They begin to sing at midnight, on the approach of the light of a candle. When well-treated they can live in a cage eight or ten years. They are found on the mountains in France and Italy ‡, in almost all the islands of the Archipelago, especially in Zira and Nia, where it is said they nestle among the heaps of stones §, and in the island of Corsica, where they are not considered as birds of passage ||. But in Burgundy, those which ar-

* Willughby, Belon, &c.

† There is every year a pair of them in the belfry of Sainte-Reine, a small town in my neighbourhood, situated on the declivity of a hill of moderate height.

‡ Belon. § Hasselquist.

|| Artier, Professor of Natural History at Bastia.

rive in the spring, and lodge on the chimney tops, and in ruined churches, were never known to spend the winter in that province. The Solitary Ouzel may not migrate in Corsica, and yet flit from one part to another, according to the change of seasons, as it does in France.

The singular habits of this bird, and the charms of its song, have inspired in the people a sort of veneration for it. I know some places where it is looked upon as lucky, where they would hardly suffer its nest to be disturbed, and dread its death as a public misfortune.

The Solitary Ouzel is rather smaller than the common Blackbird, but its bill is stronger and more hooked near the point, and the legs are shorter in proportion. Its plumage is brown of different shades, and speckled throughout with white, except on the rump, and on the feathers of the wings and tail. Also, its neck, throat, breast, and the coverts of the wings, are in the male of a blue tinge, with purple reflexions, entirely wanting in the female, which is of an uniform brown, with yellowish speckles. In both, the iris is of an orange yellow, the opening of the nostrils wide, the edges of the bill scalloped near the tip, as in almost all the Blackbirds and Thrushes; the inside of the mouth yellow, the tongue parted into three threads, of which the mid one is the longest; twelve quills in the tail, nineteen in each wing, the first of which is very short: lastly, the first *phalanx* of the outer toe

is

is joined to that of the middle one. The total length of the bird is eight or nine inches; its alar extent twelve or thirteen; its tail three; its leg thirteen lines; and its bill fifteen; the wings, when closed, reach beyond the middle of the tail. [A]

[A] Specific character of the *Turdus Solitarius*:—"It is dusky, a great part of it spotted with white, its tail blackish."

M

FOREIGN BIRDS,

WHICH ARE RELATED TO THE SOLITARY OUZEL.

I.

The PENSIVE THRUSH.

Le Merle Solitaire de Manille, Buff.

Turdus Manillensis, Gmel.

THIS species seems to be intermediate between the Solitary Ouzel and the Rock Blackbird. It has the colours of the latter, and distributed partly in the same order; but its wings are not so long, though when closed they reach to two-thirds of the tail. Its plumage is a slate-blue, uniform on the head, the hind-part of the neck, and the back; almost quite blue on the rump, speckled with yellow on the throat, and on the fore-part of the neck and top of the breast. The same blue colour is deeper on the coverts of the wings, with similar speckles, though scattered more sparingly, and some white spots, which are still fewer. The rest of the under-side of the body is orange, speckled with blue and white; the quills of the wings and of the tail are blackish, and the latter edged with rufous;

rufous; lastly, the bill is brown, and the legs almost black.

The Pensive Ouzel is nearly of the size of the Rock Blackbird; its total length is about eight inches, its alar extent twelve or thirteen, its tail three, its bill only an inch.

The female has no blue or orange in its plumage, but two or three shades of brown, which form pretty regular speckles on the head, the back, and all the under-side of the body.—These two birds were presented by M. Sonnerat:

M

II.

The HERMIT THRUSH.

Le Merle Solitaire des Philippines, Buff.

Turdus Eremita, Gmel.

The figure of this bird, its port, and its bill, resemble those of the Solitary Ouzels;—and its plumage is somewhat analogous to that of the Pensive Ouzel, but it is rather smaller. Each feather in the under-side of the body is rufous of various shades, and edged with brown. The feathers of the upper-side of the body are brown with a double border, the inner blackish, and the outer dirty white. The small coverts of the wings have an ash-cast, and those of the rump and tail are quite cinereous. The head is olive,

verging on yellow, the orbits whitish, the quills of the tail and of the wings edged with gray; the bill and legs brown.

The entire length of the Hermit Ouzel is about seven inches and a half, its alar extent twelve, and its wings, if closed, reach to three-fourths of its tail, which contains twelve quills, and is only two inches and three quarters long.

This bird, which was sent by M. Poivre, resembles in so many respects the Pensive Ouzel, that I should not wonder if it be afterwards found only a variety of age or sex; especially as it is brought from the same country, is smaller, and its colour intermediate between those of the male and of the female.

M.



FOREIGN BIRDS,

WHICH ARE RELATED TO THE EUROPEAN
BLACKBIRDS.

I.

The AFRICAN THRUSH.

Le Jaunoir du Cap de Bonne Esperance, Buff.*

Turdus Morio, Linn. and Gmel.

Merula Capitis Bonæ Spei, Briss.

THIS bird has the black and yellow colours of the European Blackbirds: but the black is more brilliant, and has reflexions which in certain positions have a greenish cast. The yellow, or rather the rufous colour, is seen only on the quills of the wings, of which the three first are tipped with brown, and the following with this brilliant black I have mentioned. The same lucid refulgent black occurs on the two middle quills of the tail, and on that part of the middle quills of the wings which is uncovered; all that is hid of these middle quills, and all the lateral quills of the tail, are of a pure black. The bill is of the same black, but the legs are brown.

The African Thrush is larger than the common Blackbird; its length is eleven inches, its

* A word compounded of *Jaune*, yellow, and *Noir*, black; which are the colours of its plumage.

alar extent fifteen and a half, its tail four ; its bill, which is thick and strong, is fifteen lines, and its leg fourteen ; its wings, when closed, reach not to the middle of its tail.

M

II.

The CRESTED BLACKBIRD of China.

Gracula Cristatella, Linn. and Gmel.

Merula Sinensis Cristata, Briss.

Sturnus crinibus cinereis, &c. Klein.

The Chinese Starling, or Blackbird, Edw.

The Crested Grackle, Lath.

Though this bird is somewhat larger than the Blackbird, its bill and legs are shorter, and its tail much shorter ; almost all its plumage is blackish, with a dull blue tinge, but not glossy ; a white spot appears in the middle of the wings, and impressed on the quills, and a little white on the tips of the lateral quills of the tail ; the bill and legs are yellow, and the iris of a fine orange. There is a small tuft of pretty long feathers on the forehead, which the bird can bristle up at pleasure. But notwithstanding this mark of distinction, and the difference perceived in its proportions, we may perhaps regard it as a variety, produced by climate, of our Yellow-billed Blackbird. It has, like that

that bird, a great facility in learning to whistle airs, and in repeating words. It is difficult to be brought from China into Europe. Its length is eight inches and a half; its wings, when closed, reach to the middle of the tail, which is only two inches and a half long, and composed of twelve quills nearly equal*.

* Specific character of the *Gracula Cristatella*, LINN.—“ It is black, the primary wing-quills white at their base, and the tail-quills at their tips; the bill yellow.”

M



III.

The RUFOUS-WINGED THRUSH.

Le Podobé du Senegal, Buff.

Turdus Erythropterus, Gmel.

We are indebted to M. Adanson for this foreign and new species; its bill is brown, its wings and legs rufous, its wings short, its tail long, tapered, marked with white at the extremity of the lateral quills, and of the lower coverts. In every other part the Podobé is of the colour of our Blackbirds, and resembles them in size, and in the shape of the bill, which, however, is not yellow.

IV.

The BLACK BIRD of China.

Turdus Perspicillatus, Gmel.*The Spectacle Thrush*, Lath.

This Blackbird is larger than ours, its legs much stronger, its tail longer and differently shaped, for it is tapered. The most remarkable feature in its plumage, is what appears like a pair of spectacles, placed at the base of the bill, and extending both ways upon the eyes; the sides of these spectacles are nearly of an oval form, and black, so that they are distinctly defined on the gray plumage of the head and neck. The same gray colour, intermixed with a greenish tint, is spread over the whole of the upper-side of the body, including the wings and the intermediate quills of the tail; the lateral quills are of a much deeper colour; part of the breast, and the belly, are of a dirty white, with a little yellow, as far as the lower coverts of the tail, which are rufous. The wings when closed extend not far beyond the origin of the tail.

V. The

V.

The GLOSSY THRUSH.

Le Vert-Doré, ou Merle à Longue Queue du Senegal *, Buff.
Turdus Æneus, Gmel.

The extreme length of this bird, which is about seventeen inches, is only two-thirds of that of its tail. Its alar extent by no means corresponds to the same proportion, being narrower than that of the common Blackbird, which is a much smaller bird. Its bill is also proportionably shorter, but its legs are longer †. The prevailing colour is the fine glossy green that appears in the plumage of Ducks; the only difference is derived from the various tints and reflexions which in different parts it assumes. It is blackish on the head, with gold colour shining through; and on the rump and the two long intermediate quills of the tail are purple reflexions; on the belly and thighs a changing green, with rose-copper. Almost all the rest of its plumage is of a rich gold green.

* i. e. The Golden-Green, or Long-tailed Blackbird of Senegal.

† The measures given by Brisson are these:—Total length eighteen inches; from the point of the bill to the end of the nails ten and a half; alar extent fourteen and a quarter; the length of the tail eleven; the bill thirteen lines; the legs eighteen.

There is in the Rôyal Cabinet a bird exactly like this, only its tail is not near so long. It is probably the same bird, but caught in the time of moulting*.

* It is titled, *The Green Ouzel of Senegal*.

VI.

The CRESCENT BLACKBIRD of America.

Le Fer-a-Cheval, ou Merle a Collier d'Amerique, Buff.

Alauda Magna, Linn. and Gmel.

Sturnus Ludovicianus, var. Lath.

Merula Americana Torquata, Briss.

The Large Lark, Catesby.

The Crescent Staré, Penn. and Lath.

The only black part of the plumage of this bird is a mark shaped like a horse-shoe, which descends upon the breast, and a bar of the same colour rising on each side under the eye, and extending backwards. The first of these spots, seems, from its determined figure, to be the most characteristic of this species, and distinguishes it the best from the other collared Blackbirds. This horse-shoe is traced on a yellow ground, which is the colour of the throat and of all the under-side of the body, and which appears again between the bill and the eyes; brown predominates on the head and behind the neck, and light gray on the sides. Also the top of the head

head is marked with a whitish ray ; all the upper-side of the body is of a partridge-gray ; the quills of the wings and of the tail * are brown, with some rusty spots ; the legs brown and very long ; and the bill, which is almost black, is shaped like that of our Blackbirds ; like them also it sings agreeably in the spring, though it has not the same extent of notes. It scarcely eats any thing but the small seeds which it finds on the ground † ; in which respect it resembles the Larks, though it is much larger, exceeding even our Blackbird, nor is its hind-nail lengthened as in the Larks. It perches on the top of bushes, and its tail is observed to have a brisk motion upwards and downwards. In fact, it is neither a Lark nor a Blackbird ; and yet of all the European birds, it resembles the latter the most. It is found not only in Virginia and Carolina ; but in almost the whole continent of America ‡.

The subject examined by Catesby weighed three ounces and a quarter ; its extreme length ten inches, its bill fifteen lines, its legs eighteen ; its wings when closed reached to the middle of its tail. [A]

* Linnæus says, that the three lateral quills of the tail are partly white. *Syst. Nat.* Edit. x. p. 167.

† For instance, those of the Yellow-flowered *Ornithogalum*.

‡ Linnæus asserts that it occurs also in Africa.

[A] Authors are much divided with respect to the classification of this bird : Lawson and Catesby call it a Lark ; Brisson reckons it a Blackbird ; Pennant makes it a Stare ; and Latham regards it

as a variety of the Louisiana Star already described; and Gmelin seems inclined to the same opinion. It is thus characterized by Mr. Latham:—"Above it is variegated with rusty brown, and blackish, below yellow, with a black curved stripe on the breast, the three lateral quills of the tail white," It lives in savannas, and is esteemed good eating. In the State of New-York it appears in the beginning of April, breeds in June, and retires in September or October. It nestles on the ground, and its eggs are whitish.

M

VII.

The GREEN BLACKBIRD of Angola.

The Blue and Green Dove, Edw.

The upper-part of the body, the head, the neck, the tail, and the wings, are of an olive green; but brown spots appear on the wings, and the rump is blue. On the back, and on the fore-side of the neck, is a mixture of blue with green; the blue again occurs on the upper-part of the throat: violet predominates on the breast, the belly, the thighs, and the feathers which cover the ears: lastly, the lower coverts of the tail are of an olive yellow, the bill and legs of a deep black.

This bird is of the same size with the fifty-third Thrush of Brisson; the proportions are likewise the same, but the plumage of the latter is different, being entirely of a fine duck-green, with

with a spot of steel-violet on the anterior part of the wing.

These birds are nearly of the bulk of our Blackbird, their length being nine inches, their alar extent twelve and a quarter, their bill eleven or twelve lines; their wings when closed reach to the middle of the tail, which consist of twelve equal quills.

It is probable that these two birds belong to the same species, but I cannot decide which is the original stem, and which the collateral branch. [A]

[A] This bird is a variety of the *Shining Thrush* of Latham, the *Turdus Nitens* of Linnæus, and the *Turdus Viridis Angolensis* of Brisson. The character of the species is, "That it is green, with a spot of shining violet on the coverts of the wings."

M

VIII.

The GILDED THRUSH.

Le Merle Violet du Royaume de Fuida, Buff.

The plumage of this bird is painted with the same colours as the preceding, that is, with violet; green, and blue, but differently distributed; violet is spread without any mixture on the head, the neck, and all the under-part of the body; blue on the tail and its upper coverts; and lastly,

ly, green on the wings; but these have besides a blue stripe near their inner margin.

This bird is also of the same size with the preceding: it appears to have the same port; and as it comes from the same climates, I should be tempted to refer it to the same species, were it not longer winged, which implies other instincts and habits. But as the length of the wings in dried birds depends greatly on the mode of preparing them, we cannot admit the circumstance just mentioned to constitute a specific difference; and it will be prudent to wait the decision of accurate observation.

IX.

The C E Y L O N T H R U S H.

Le Plastron-Noir de Ceilan, Buff.

Turdus Zeylonus, Linn. and Gmel.

Merula Torquata Capitis Bonæ Spei, Briss.

The Green Pye of Ceylon, Edw.

I bestow a separate name on this bird, because those who have seen it do not agree with regard to the species to which it belongs. Brisson makes it a Blackbird, and Edwards a Pie or a Shrike. For my own part, I conceive it to be a Ring-Ouzel, not venturing, however, to decide, till farther information clear up the subject.

ject. It is smaller than the Blackbird, and its bill proportionably stronger. Its total length is seven inches and a half, its alar extent eleven, its tail three and a half, its bill twelve or thirteen lines, and its legs fourteen; its wings when closed reach beyond the middle of its tail, which is somewhat tapered.

The black breast-piece which distinguishes this bird is the more conspicuous, as it is bounded above and below by a lighter colour, for the throat and all the under-part of the body is of a pretty bright yellow. From the two ends of the upper-margin of this breast-piece arise two cords of the same colour, which first ascending on each side towards the head, define the beautiful yellow orange plate on the throat, and then bending under the eyes, terminate at the base of the bill, where they are in a manner inserted. Two yellow eye-brows, which take their origin close to the nostrils, embrace the eyes above, and form a contrast to the black cords. All the upper-part of this bird is olive; but that colour seems to be tarnished by a mixture of cinereous on the top of the head, and on the contrary to brighten on the rump, and on the outer edge of the wing-quills; the largest of these are tipped with brown; the two intermediate ones of the tail are of an olive green, and also the whole of the under-part of the body; and the ten lateral ones are black, tipped with yellow.

The

The female has neither the black breast-piece nor the black cords. Its throat is gray; its breast and belly of a greenish yellow; and all the upper-side of the body of the same colour, but deeper. In general, the female differs little from the bird figured *Pl. Enl.* No. 358, under the name of the *Orange-bellied Blackbird of Senegal*.

Briffon has supposed that this bird is a native of the Cape of Good Hope; and indeed it was brought from that place by the Abbé de la Caille. But if we believe Edwards, it belongs to a more distant climate, that of the island of Ceylon. That naturalist obtained accurate information on this subject from John Gideon Loten, who had been governor of Ceylon, and who, on his return from India, presented several birds of that country to the Royal Society; and among the rest a Ceylon Thrush. Edwards introduces here an observation which we have already anticipated, but which it may not be improper to repeat. The Cape of Good Hope is the general rendezvous of ships trading to the East, and it may often happen, that in touching there, birds may be left which afterwards are mistaken for natives of the extremity of Africa.

X.

The ORANGE-GREEN or the ORANGE-BELLIED BLACKBIRD of Senegal.

Turdus Chrysogaster, Gmel.

The Orange-bellied Thrush, Lath.

The principal colours of this new species are green and orange; a fine deep green, with reflexions which are variously shaded with yellow, is spread over the whole of the upper-part of the body, including the tail, the wings, the head, and even the throat, but is not so deep on the tail. The under-part of the body, from the throat downwards, is of a shining orange. When the wings are closed, there appears a train of white which belongs to the outer edge of some of the quills. The bill is brown, and also the legs.—This bird is smaller than the Blackbird; its length is about eight inches; its alar extent eleven and a half; its tail two and three-quarters, and its bill eleven or twelve lines.

VARIETY of this BIRD.

The preceding bird resembles much the female of the Ring-Ouzel of Ceylon; but it is
 13 equally.

equally related to the *Blackbird of the Cape of Good Hope*, No. 221, which I call *Orange-Blue (orambleu)*; for the whole of the under-part of its body is orange, from the throat to the lower belly inclusive; and blue is spread over the upper-part from the base of the bill to the end of the tail. This blue consists of two shades, the deeper of which edges each feather, whence results an agreeable and regular variety. The bill and legs are black, and also the quills of the wings; but many of the middle ones have a white-gray margin: lastly, the tail-quills are the most uniform in regard to colour.

XI.

The BROWN BLACKBIRD of the CAPE of GOOD HOPE.

Turdus Bicolor, Gmel.

The White-rumped Thrush, Lath.

We are indebted to Sonnerat for this new species. It is nearly the size of the Blackbird; its total length ten inches, and its wings extend a little beyond the middle of the tail. Almost all its plumage is of a varying brown, with reflexions of dusky green: the belly and rump are white.

XII. The

XII.

The BANIAHBOU of Bengal.

Turdus Canorus *Lanius Faustus*, Linn. and Gmel.

Merula Bengalensis, Briss.

The Brown Indian Thrush, Edw.

The Crying Thrush, Lath.

Its plumage is every where brown ; deeper on the upper-part of the body, lighter on the under, and also on the edge of the coverts and wing-quills ; the bill and legs are yellow ; the tail tapered, about three inches long, and extending half its length beyond the closed wings. Such are the chief circumstances which characterize this foreign bird, the size of which somewhat exceeds that of the Throistle.

Linnaeus informs us, on the authority of some Swedish naturalists who had travelled into Asia, that the same bird occurs in China ; but it seems there to have been affected by the climate, being gray above and rust-coloured below, with a white streak on each side of the head. The epithet of *canorus*, which Linnaeus bestows on it, no doubt from accurate information, implies that these foreign Blackbirds have an agreeable warble.

XIII.

The CINEREOUS BLACKBIRD.

L'Ourovang, ou Merle Cendré de Madagascar, Buff.

Turdus-Urovang, Gmel.

Merula Madagascariensis Cinerea, Briss.

The name Cinereous Blackbird gives a very just idea of the predominant colour of the plumage: but the intensity is not every where the same: it is very deep, almost black, with a slight tinge of green on the long and narrow feathers that cover the head: it is lighter without mixture of other tinge on the quills of the tail and of the wings, and on the great coverts of the latter. It has an olive cast on the upper-part of the body, on the small coverts of the wings, on the neck, on the throat, and on the breast. Lastly, it is lighter under the body, and about the lower belly, and there is a slight tinge of yellow.

This Blackbird is nearly as large as our Red-Wing, but its tail is rather longer, its wings somewhat shorter, and its legs much shorter. Its bill is yellow, as in our Blackbirds, marked near the end with a brown ray, and furnished with some bristles round the base; its tail consists of twelve equal quills, and its legs are of a brown colour.

XIV. The

XIV.

The PIGEON THRUSH.

Le Merle des Colombiers, Buff.
Turdus Columbinus, Gmel.

This bird is called, in the Philippines, the *Pigeon-house Stare*; because it is naturally familiar, and seeks the conveniencies which the dwellings of men afford, and nestles even in the pigeon-houses. But it resembles the Blackbird more than the Stare, in the shape of its bill and legs, and in the proportions of its wings, which only reach the middle of the tail, &c. Its bulk is nearly that of the Red-Wing, and its plumage consists of one colour, though not uniform; this is a varying green, which, according to its position, has different shades and reflexions. This species is new, and we are indebted for it to Sonnerat. There are also found in the collection which he brought from the Cape of Good Hope, some individuals that evidently belong to the same species, but which differ in having their rump white, both on the upper and under surface, and in being smaller. Must this be ascribed to climate or to age*?

* Specific character of the *Turdus Columbinus*:—"It is green, with different coloured reflexions."

M

XV.

The OLIVE THRUSH.

Le Merle Olivé du Cap de Bonne Esperance, Buff.
Turdus Olivaceus, Linn. and Gmel.

The upper-part of the body of this bird, including what appears of the quills, of the tail, and of the wings, when they are closed, is of an olive-brown; the neck and the breast are of the same colour as the throat, but without streaks; all the rest of the under-part of the body is of a fine fulvous colour: lastly, the bill is brown, as well as the legs, and the inside of the quills of the wings and the lateral quills of the tail.

This Blackbird is as large as a Red-Wing; its alar extent near thirteen inches, and its total length eight and a quarter; the bill is ten lines, the leg fourteen; the tail, which consists of twelve equal quills, is three inches long; and the wings, when closed, reach only half its length*.

* Specific character of the *Turdus Olivaceus*:—"It is somewhat dusky, below dusky."

M
 The
 XVI. The

XVI.

The BLACK-THROATED THRUSH.

*Le Merle à Gorge Noire de Saint Domingue, Buff.**Turdus Ater, Gmel.*

The black on the throat of this bird extends on the one hand below the eye, and even on the space between the eye and the bill; and on the other it descends upon the neck as far as the breast. It is besides edged with a broad rufous border, with different shades of brown, which extends upon the eyes and upon the fore-part of the top of the head; the rest of the head, the posterior surface of the neck, the back, and the small coverts of the wings, are grayish brown, variegated slightly with some browner tints. The great coverts of the wings, as well as the quills, are of a blackish brown, edged with light gray, and separated from the small coverts by an olive-yellow line belonging to these small coverts. The same olive-yellow predominates on the rump, and on all the under-part of the body; but under the body it is variegated with some black spots, which are pretty broad, and scattered thinly over the whole space between the black piece of the throat and the legs. The tail is of the same gray as the upper-part of the body, but in its middle only; the lateral quills being edged

on the outside with a blackish colour; the bill and the legs are black.

This bird, which has not been hitherto described, is nearly of the bulk of the Red-Wing; its total length is about seven inches and a half, its bill one inch, its tail three; and its wings, which are very short, reach scarcely the fourth of its tail.

M.

XVII.

The CANADA BLACK BIRD.

This resembles the most the Mountain Black-bird, which is only a variety of the Ring Ouzel. It is smaller, but its wings bear the same proportion to its tail, not-reaching beyond the middle, and the colours of its plumage, which are not very different, are distributed in the same manner. The ground colour is constantly dark-brown, variegated with lighter shades in every part, except in the quills of the tail and of the wings, which are of an uniform blackish brown. The coverts of the wings have reflexions of a deep but shining green; all the other feathers are blackish, and terminated with rufous, which, disjoining them from one another, produces a regular variety, so that the feathers may be counted from the rufous spots.

M.

XVIII. The

XVIII.

The INDIAN OLIVE BLACKBIRD.

Turdus Indicus, Gmel.*Merula Olivacea Indica*, Briss.*The Indian Thrush*, Lath.

All the upper-part of this bird, including the quills of the tail, and those uncovered of the quills of the wing, are of a deep olive-green. All the under-part is of the same ground-colour, but of a lighter tinge, and bordering upon yellow. The inner webs of the wing-quills are brown, edged partly with yellow; the bill and legs are almost black.—This bird is larger than the Red-Wing; its whole length is eight inches, its alar extent twelve and a half, its tail three and a half, its bill thirteen lines, its leg nine, and its wings when closed reach to the middle of its tail.

M

XIX.

The INDIAN CINEREOUS BLACKBIRD.

Turdus Cinereus, Gmel.*Merula Cinerea Indica*, Briss.*The Ash-coloured Thrush*, Lath.

The colour of the upper-part of the body is deeper than that of the under. The great co-

verts. and the quills of the wings are edged with white-gray on the outside; but the middle quills have this edging broader. They have likewise another border of the same colour on the inside, from their origin, to two-thirds of their length. Of the twelve tail-quills, the two middle ones are cinereous, like the upper-part of the body; the two following are partly of the same colour, but their inside is black: the eight others are entirely black, as also the bill, the legs, and the nails. The bill has some blackish bristles near the angles of its opening.—This bird is smaller than the Red-Wing; it is seven and a quarter in length, twelve and two-thirds alar extent; its tail is three inches, its bill eleven lines, and its leg ten.

XX.

The BROWN BLACKBIRD of Senegal.

Turdus Senegalensis, Gmel. —

Merula Senegalensis, Briff.

The Senegal Thrush, Lath.

Nothing can be more uniform and ordinary than the plumage of this bird, or more easy to describe. It is grayish brown on the upper and anterior parts, dirty white on the under-part, brown on the quills of the tail and of the wings, and also on the bill and legs. It is not so large

as the Red-Wing, but its tail is longer, and its bill shorter. Its whole length, according to Brisson, is eight inches; its alar extent eleven and a half, its tail three and a half, its bill nine lines, its leg eleven. Its wings do not reach farther than the middle of its tail, which consists of twelve quills.

XXI.

The TANOMBÉ, or the MADAGASCAR BLACKBIRD.

Turdus Madagascariensis, Gmel.

Merula Madagascariensis, Briss.

The Madagascar Thrush, Lath.

I have retained the name by which this bird is known in its native region. It is to be wished that travellers would thus preserve the real names of the foreign birds; we should then be able to distinguish the species to which each observation applied.

The *Tanombé* is rather smaller than the Red-Wing; its plumage is in general of a very deep brown on the head, neck, and all the upper-part of the body; but the coverts of the tail and wings have a tinge of green. The tail is a gold green, edged with white, as also the wings, which have, besides, some violet changing into green

green at the tips of the great quills, a colour of polished steel on the middle quills and the great coverts, and an oblong mark of fine gold-yellow on the same middle quills. The breast is of a rufous brown, the rest of the under-part of the body white; the bill and legs are black, and the tarsus very short. The tail is somewhat forked; the wings reach only to the middle, but its alar extent is greater in proportion than in the Red-Wing. I may observe, that in a subject which I had occasion to see, the bill was more hooked at the point than represented in the figure, and in this respect the Tanombé seems to resemble the Solitary Blackbird.

XXII.

The MINDANAO BLACKBIRD.

Turdus Mindanensis, Gmel.

The Mindanao Thrush, Lath.

The steel colour which appears on part of the wings of the Tanombé, is, in the Mindanao Blackbird, spread over the head, the throat, the neck, the breast, and all the upper-part of the body as far as the end of the tail. The wings have a white bar near their outer margin, and the rest of the under-part of the body is white.

This

This bird exceeds not seven inches in length, and its wings reach only the middle of the tail, which is somewhat tapered.—It is a new species, introduced by Sonnerat.

Daubenton the younger has observed another individual of the same kind, in which the ends of the long quills of the wings and of the tail are of a deep varying green, with several spots of wavy-violet on the body, but chiefly behind the head. It is perhaps a female, or else a young male.

XXIII.

The GREEN BLACK-BIRD of the Isle of France.

Turdus Mauritianus, Gmel.
The Mauritius Thrush, Lath.

The plumage of this bird is quite uniform, all the outside being bluish green, verging to brown, but its bill and legs cinereous. It is smaller than the Red-Wing: its length is about seven inches, its alar extent ten and a half, its bill ten lines, and its wings reach to the third of its tail, which is only two inches and a half. The feathers that cover the head and neck are long and narrow.—It is a new species.

XXIV. The

XXIV.

The BLACK CASQUE, or the BLACK-HEADED BLACKBIRD of the Cape of Good Hope.

Though, at first sight this bird seems to resemble most in its plumage that of the following article, the *Brunet*, and particularly the *Yellow-rumped Blackbird of Senegal*, which I consider as a variety of the same species, we still perceive obvious differences in its colour, and more important ones in the proportions of its limbs. It is not so large as the Red-Wing; its total length nine inches, its alar extent nine and a half, its tail three and two-thirds, its bill thirteen lines, and its leg fourteen. Its wings, therefore, spread less than those of the *Brunet*, but its bill, tail, and legs, are proportionably longer. Its tail is also of a different form, and consists of twelve tapered quills; each wing has nineteen, of which the longest are the fifth and the sixth.

With regard to its plumage, it resembles that bird in the brown colour of the upper-part of its body, but it differs by the colour of its helmet, which is of a shining black; by the rufous colour of its rump, and of the upper-coverts of its tail; by the rusty cast of its throat, and of the whole of the under-part of its body, as far as

the lower coverts of the tail inclusively; by the small brown ray on the flanks; by the small white spot which appears on the wings, and which belongs to the large quills; by the blackish colour of the quills of the tail; and lastly, by the white mark which terminates the lateral ones, and which is larger as the quill is nearer the outside.

XXV.

The BRUNET of the Cape of Good Hope.

Turdus Capensis, Linn. and Gmel.

Merula Fusca Capitis Bonæ Spei, Briss.

The Brunet Thrush, Lath.

The predominant colour of the plumage of this bird is deep brown, which is spread over the head, the neck, all the upper-part of the body, the tail, and wings; it is rather lighter on the breast and sides, has a yellowish cast on the belly and thighs, and gives place to a beautiful yellow on the lower coverts of the tail. This yellow spot is the more conspicuous, as it is contrasted with the colour of the quills of the tail, which are of a still deeper brown below than above. The bill and legs are entirely black. This

This bird is not larger than a Lark; its wings measure ten inches and a half across, and hardly reach to the third of its tail, which is near three inches long, and consists of twelve equal quills*.

* Specific character of the *Turdus Capensis*:—"It is dusky, its belly somewhat yellowish, its vent yellow."

VARIETY of the CAPE BRUNET.

The bird represented *Pl. Enl. No. 317*, by the name of the *Yellow-rumped Blackbird of Senegal**, is much analogous to the Brunet, only it is rather larger, and its head and throat are black. The remaining parts are of the same colour in both, and nearly of the same proportions; which would lead us to suppose that it is a variety produced by difference of age or of sex. But having occasion afterwards to observe that, among a great number of birds sent by Sonnerat, many marked "Cape Blackbirds" were exactly like the subject described by Brisson, and not one with a black head and throat; it seems more probable that the bird, No. 317, is only a variety derived from climate. The bill of this bird is broader at the base, and more curved than that of the ordinary Blackbird.

* *Merle à cul-jaune du Senegal.*

XXVI.

The BROWN JAMAICA BLACKBIRD.

Turdus Aurantius, Gmel.

Merula Jamaicensis, Briss.

Merula Fusca, Ray, Sloane, and Klein.

The White-chinned Thrush, Lath.

Deep brown is the predominant colour of the head, the upper-part of the body, the wings, and the tail; brown of a lighter shade on the fore-side of the breast and of the neck, dirty white under the belly, and on the rest of the lower-part of the body. The most remarkable feature in this bird is, that the throat and bill are white, and the legs orange. Its extreme length is six inches four lines, its alar extent nine inches and some lines, its tail two inches and eight or nine lines, its leg two inches and a quarter, its bill eleven lines; all English measure. It appears then that it is not so large as our Red-Wing. It generally haunts the mountains and forests, and is esteemed good eating. All that Sloane informs us, with respect to the interior structure of this bird, is, that its fat is of an orange-yellow*.

* Specific character of the *Turdus Aurantius*. — "It is blackish-brown, the upper-part of its throat and its belly whitish, its bill and legs orange."

XXVII.

The CRAVATED BLACKBIRD of Cayenne~

Turdus Cinnamomeus, Gmel.*The Black-breasted Thrush*, Lath.

The cravat of this Blackbird is very broad, of a fine black edged with white; it extends from the base of the lower mandible, and even from the space included between the upper mandible and the eye, as far as the middle of the breast, where the white border widens, and is marked with transverse rays of black: it covers the sides of the head as far as the eyes, and incloses three-fourths of the circumference of the neck. The coverts of the wings are of the same black as the collar; but the small ones are tipped with white, which produces speckles of that colour; and the two rows of great coverts have a fulvous edging. The rest of the plumage is cinnamon colour, but the bill and legs are black.

This Blackbird is smaller than our Red-Wing; the point of its bill is hooked as in the Solitary Thrushes. Its whole length is about seven inches, its tail two and a half, its bill eleven lines, and its wings, which are short, extend but a little way beyond the origin of the tail.

XXVIII.

* The CRESTED BLACKBIRD of the Cape
of Good Hope.

Turdus Cafer, Linn. and Gmel.
The Cape Thrush, Lath.

The crest is not permanent; it consists of long narrow feathers, which naturally recline on the top of the head, but which the bird can bristle at pleasure. Its colour, and that of the head and the breast, is a fine black, with violet reflexions; the fore-side of the neck and breast have the same wavy gloss on a brown ground. This brown is spread on all the upper-part of the body, and extends over the neck, the coverts of the wings, part of the tail-quills, and even under the body, where it forms a sort of broad cincture which passes under the belly; but in all these places it is softened by a whitish colour which edges and defines each feather, in the same way nearly as in the Ring Ouzel.

The lower coverts of the tail are red, the upper white, the abdomen also white, and the bill and legs black. The corners where the bill opens are shaded with long black bristles projecting forwards. This Blackbird is scarcely larger than the Crested Lark. Its wings measure eleven or twelve inches across, and when closed do not reach

reach the middle of the tail. The longest feathers are the fourth and fifth, and the first is the shortest of all *.

* Specific character of the *Turdus Cafer*:—" It is somewhat crested, its rump and belly white, its vent red."

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XXIX.

The AMBOYNA BLACKBIRD.

Turdus Amboinensis, Gmel.

The Amboina Thrush, Lath.

I allow this bird to remain in the place assigned it by Brisson, though I am not quite certain whether it really belongs to this genus. Seba, who first noticed it, tells us that he ranged it among the Nightingales, on account of the sweetness of its song; it not only chants its loves in the spring, but erects its long beautiful tail, and bends it in a singular manner over its back. All the upper-part of its body is reddish brown, including the tail and the wings, except that these are marked with a yellow spot; all the under-part of the body is of this last colour, but the lower surface of the tail-quills is golden. These are twelve in number, and regularly diminishing.

XXX. The

XXX.

The BLACKBIRD of the Isle of Bourbon.

Turdus Borlonica, Gmel.*The Bourbon Thrush*, Lath.

The size of this bird is nearly that of the Crested Lark; it is seven inches and a half long, and eleven and one-third across the wings; its bill ten or eleven lines, its legs the same, and its wings reach not to the middle of its tail, which is three inches and a half long, and consequently almost half the whole length of the bird.

The top of the head is covered with a sort of black cap; all the rest of the upper-part of the body, the small coverts of the wings, the whole of the tail and breast, are of an olive-ash colour; the rest of the under-part of the body is olive, verging on yellow, except the middle of the belly, which is whitish. The great coverts of the wings are brown, with some mixture of rufous; the wing-quills are parted by these two colours; the brown being placed within and beneath, the rufous before. We must, however, except the three middle-quills, which are entirely brown; those of the tail are brown also, and intersected near their end by two bars of different shades of brown, but from the sameness of the ground colour they are very indistinct: the bill and legs are yellowish.

XXXI.

The DOMINICAN BLACKBIRD
of the Philippines.*Turdus Dominicanus*, Gmel.*The Dominican Thrush*, Lath:

The length of the wings is one of the most remarkable characters of this new species; they reach as far as the tail. Their colour, as well as that of the under-side of the body, is brown, on which appear a few irregular spots of the colour of polished steel, or rather of changing violet*. This brown ground assumes a violet cast at the origin of the tail, and a greenish at the end; it is lighter on the side of the neck, and becomes whitish on the head and all the lower-part of the body. The bill and legs are light brown.

This bird is scarcely six inches long. It is a new species, for which we are indebted to Sonnerat.

* These violet spots, irregularly scattered on the upper-side of the body, have led Daubenton the younger to suppose, that this individual was killed at the close of the moulting season, before the true colours of its plumage had stability.

XXXII.

The GREEN CAROLINA BLACKBIRD.

Catesby, who observed this bird in its native region, informs us, that it is scarcely larger than a Lark,

Lark, and its figure is nearly the same; that it is extremely shy, and conceals itself dexterously; that it haunts the banks of the large rivers, two or three hundred miles from the sea, and flies with its feet extended backwards (as usual in those of our own birds, whose tails are very short), and that its song is loud. It probably subsists on the seeds of the purple-flowered nightshade.

All the upper-part of the body is of a dull green, the eye is almost encircled with white, the lower jaw delicately edged with the same colour; the tail brown; the under-sides of the body, except the lower belly, which is whitish, the bill and the legs, black: the quills of the wings do not reach much beyond the origin of the tail.

The total length of the bird is about seven inches and a quarter, its tail three, its leg twelve lines, its bill ten,

XXXIII.

THE TERAT BOULAN, or the INDIAN BLACKBIRD.

Turdus Orientalis, Gmel.

Merula Indica, Briss.

The Ash-rumped Thrush, Lath.

The characters of this species are these: The bill, legs, and toes, are proportionably shorter than

than in the others ; the tail is tapered, but differently from ordinary ; the six middle quills are of equal lengths, and it is properly the three lateral quills on each side that are tapered. The upper-part of the body, the neck, the head, and the tail, are black, the rump cinereous, and the three lateral feathers on each side tipped with white. The same white prevails on all the under-part of the body and of the tail, on the fore-side of the neck, and of the throat, and extends both ways over the eyes ; but on each side a small black streak rises at the base of the bill, and seems to pass under the eye, and extend beyond it. The great quills of the wings are blackish, edged half-way with white on the inside ; the middle quills, and also the great coverts, are likewise edged with white, but on the outside, and through their whole length.

This bird is rather larger than the Lark ; its alar extent is ten inches and a half, and its wings extend a little beyond the middle of its tail. Its length, from the point of the bill to the end of the tail, is six inches and a half, and to the end of the nails five and a half ; the tail is two and a half, the bill eight lines and a half, the leg nine, and the middle toe seven.

XXXIV.

The SAUI JALA, or the GOLDEN BLACK-
BIRD of Madagascar.

Turdus Nigerrimus, Gmel.

Merula Madagascariensis Aurea, Briss.

The Black-checked Thrush, Lath.

This species, which is an inhabitant of the ancient continent, retains in part the plumage of our Blackbirds. Its bill, legs, and nails, are blackish; it has a sort of collar of fine velvet black, which passes under the throat, and extends only a little beyond the eyes; the quills of the tail and of the wings, and the plumage of the rest of the body, are always black, but edged with lemon colour, as they are edged with gray in the Ring Ouzel; so that the shape of each feather is beautifully defined on the contiguous feathers which it covers.

This bird is nearly of the size of the Lark; its alar extent is nine inches and a half, and its tail is shorter than in our Blackbirds, in proportion to the total length of the bird, which is five inches and three quarters, and also in proportion to the length of its wings, which stretch almost to two-thirds of its tail. The bill is ten lines, the tail sixteen, the legs eleven; and the middle toe ten.

XXXV.

The SURINAM BLACKBIRD,

Turdus Surinamus, Gmel.*Merula Surinamensis*, Briss.*The Surinam Thrush*, Lath.

We find in this American Blackbird the same ground colour that predominates in the common Blackbird. It is almost entirely of a shining black, but diversified by other tints. On the crown of the head is a yellowish fulvous plate; on the breast are two marks of the same colour, but of a lighter shade; on the rump is a spot of the same hue; on the wings is a white line that borders them from their origin to the third joint; and lastly, under the wings is white, which prevails over all the lower coverts: so that in flying this bird discovers as much white as black. Its legs also are brown, and its bill only blackish; and also the wing-quills, and all those of the tail, except the two first and the last, which are a yellowish fulvous colour at their origin, but only in the inside.

The Surinam Blackbird is not larger than a Lark; its whole length is six inches and a half; its alar extent nine and a half; its tail three nearly; its bill eight lines, and its legs seven or eight; lastly, its wings stretch beyond the middle of its tail.

XXXVI. The

XXXVI.

The PALMISTE.

Turdus Palmarum, Linn. and Gmel.

The Palm Thrush, Lath.

This bird owes its name to its habits of lodging and nestling in palm-trees, where it no doubt gathers its food. Its bulk is equal to that of the Lark; its length is six inches and a half, its alar extent ten and one-third, its tail two and a half, and its bill ten lines.

What strikes us first in the plumage is a sort of large black cap; which descends both ways lower than the ears, and is marked on each side with three white spots, the one near the forehead, the other above the eye, and the third below it. The neck is ash-coloured behind where it is not covered by this black cap, and white before, as also the throat. The breast is cinereous; and the rest of the under-part of the body is white-gray. The upper-part of the body, including the small coverts of the wings, and the twelve quills of the tail, is of a beautiful olive-green; the parts of the wing-quills that appear are of the same colour, and the rest is brown. The bill and legs are cinereous.—The wings stretch a little beyond the middle of the tail.

The bird, which Brisson has made another species of the Palmiste, differs from the preceding
in

in nothing but that its cap, instead of being entirely black, has an ash-coloured bar on the top of the head, and has rather less white under the body. But in every other respect the resemblance is exact, and not a word of the description needs to be altered: and as they inhabit the same country, I do not hesitate to conclude that these two individuals belong to the same species, and I am disposed to think that the first is the male, and the second the female.

XXXVII.

The WHITE-BELLIED VIOLET BLACK-BIRD of Juida.

Turdus Leucogaster, Gmel.

The Whidab Thrush, Lath.

The name of this bird contains almost a complete description of its plumage. I need only add, that the great wing-quills are blackish, that the bill is of the same colour, and the legs cinereous. It is rather smaller than the Lark; its length is about six inches and a half, its alar extent ten and a half, its tail sixteen lines, its bill eight, its legs nine.—The wings stretch three-fourths of the tail.

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XXXVIII. The

XXXVIII.

The RUFOUS BLACKBIRD of Cayenne.

Turdus Rufifrons, Gmel.*The Rufous Thrush*, Lath.

The front and sides of its head, the throat, and all the fore-part of its neck and belly, are rufous. The top of the head, and all the upper-part of the body, including the superior coverts of the tail, and the quills of the wings, brown; the superior coverts of the wings black, edged with bright yellow, which is conspicuous on the ground colour, and terminates each row of these by a waving line. The lower coverts of the tail are white; the tail, the bill, and the legs, are cinereous.

This bird is smaller than the Lark; its total length is only six inches and a half. I could not measure it across the wings; but these were certainly not broad, for when closed they did not reach beyond the coverts of the tail. The bill and the legs are each eleven or twelve lines.

XXXIX. The

XXXIX.

The LITTLE RUFOUS-THROATED
BROWN BLACKBIRD of Cayenne.*Turdus Pectoralis*, Lath. Ind.*The Yellow-breasted Thrush*, Lath.

I scarcely need add any thing to this description. The rufous extends over the neck and breast; the bill is cinereous black, and the legs greenish-yellow. It is nearly of the size of the Goldfinch; its total length is hardly five inches, the bill seven or eight lines, the legs eight or nine; and the wings reach beyond the middle of the tail, which in all is only eighteen lines.

XL.

The OLIVE BLACKBIRD of St. Domingo.

Turdus Hispaniolensis, Gmel.*Merula Olivacea Dominicensis*, Briss.*The Hispaniola Thrush*, Lath.

The upper-part of its body is olive, and the under gray, mixed confusedly with the same colour. The inner webs of the tail-quills, of those of the wings, and of the great coverts of these,

these, are brown, edged with white or whitish; the bill and legs are grayish-brown.

This bird is scarcely larger than the Petty Chaps; its whole length is six inches, its alar extent eight and three-quarters, its tail two, its bill nine lines, its legs of the same length; its wings reach beyond the middle of its tail, which consists of twelve equal quills.

We may consider the *Olive Blackbird of Cayenne*, Pl. Enl. No. 558, as a variety of this; the only difference is, that the upper-part of the body is of a browner green, and the under of a lighter gray; the legs are also more blackish.

XLI.

The OLIVE BLACKBIRD of Barbary.

Mr. Bruce saw, in Barbary, a Blackbird, which was larger than the Miffel; all the upper-part of the body was an olive yellow, the small coverts of the wings the same colour, with a tinge of brown, the great coverts and the quills black, the quills of the tail blackish, tipped with yellow, and all of equal length; the under-part of the body of a dirty white, the bill reddish brown, the legs short and lead-coloured; the wings reached only to the middle of the tail. It resembles much the Barbary Thrush already described,

described, but it has no speckles on its breast ; and besides, there are other differences, which would lead us to refer them to two distinct species.

XLII.

The MOLOXITA, or the NUN of Abyffinia.

Turdus Monacha, Gmel.

The Nun Thrush, Lath.

Not only is this bird of the same figure and size with the Blackbirds, but like them it inhabits the forests, and lives on berries and fruits. Instinct, or perhaps experience, teaches it to lodge in trees near the brink of precipices : so that it is difficult to be shot, and still more to be found after it has dropped. It is remarkable for a great black cowl which covers the head and throat, and descends over the breast like a pointed stomacher ; on this account it has been called the *Nun*. The whole of the upper-part of the body is yellow, more or less inclined to brown ; the coverts of the wings, and the quills of the tail, are brown, edged with yellow ; the quills of the wings different shades of black, and edged with light-gray or white ; all the under-part of the body, and the thighs, light-brown ; the legs cinereous, and the bill reddish.

XLIII.

The BLACK and WHITE BLACKBIRD
of Abyssinia.

Turdus Æthiopicus, Gmel.
The Ethiopian Thrush, Lath.

Black extends over all the upper-part, from the bill inclusively to the end of the tail, excepting however the wings, on which we perceive a cross bar of white, conspicuous on the dark ground; white predominates in the under-part, and the legs are blackish. This bird is nearly of the size of the Red-Wing, but is rounder shaped; the tail is square at the end, and the wings so short, that they scarcely reach beyond its origin. It sings nearly like the cuckoos, or rather the wooden clocks that imitate the cuckoos.

It haunts the thickest woods, and would be difficult to be discovered, but for its song; which would seem to shew that it does not seek safety in concealment, since the same instinct would enjoin silence.

This bird feeds on fruits and berries, like the Blackbirds and Thrushes.

XLIV.

The BROWN BLACKBIRD of Abyssinia.

Turdus Abyssinicus, Gmel.*The Abyssinian Thrush*, Lath.

The ancients have spoken of an Æthiopian olive-tree that bore no fruit: this bird feeds on the flower of that tree. If it were contented with that provision, few would have reason to complain. But it also eats grapes, and is very destructive in the season. This Blackbird is nearly as large as a Red-Wing; all the upper-part of the head and of the body is brown; the coverts of the wings of the same colour; the quills of the wings and of the tail deep-brown, edged with a lighter brown; the throat of a light brown; all the under-part of the body of a fulvous yellow, and the legs black*.

* Elegant drawings of the four last species were communicated by M. le Chevalier Bruce, (James Bruce, Esq. of Kinnaird,) of whom the author makes very honourable mention.

The GRISIN of Cayenne.

THE top of the head is blackish, the throat black ; and this black colour extends from the eyes as far as the lower-part of the breast : it has a sort of white eye-brows, which appear distinct on the dusky ground, and connect the eyes by a white line, which borders the base of the upper mandible. All the upper-part of the body is cinereous gray ; the tail is deeper, and terminated with white ; its lower coverts and the belly are also white ; the coverts of the wings are blackish, and their limits accurately defined by a white border. The quills of the wings are edged without with light gray, and tipped with white ; the bill is black, and the legs cinereous.

This bird is not larger than a Pettychaps ; its length is about four inches and a half, its bill seven lines, its legs the same, and its wings reach to the middle of its tail, which is rather tapered.

In the female, the upper-part of the body is more cinereous than in the male ; what is black in the latter is only blackish in the former, and for that reason the edge of the coverts of the wings is not so perceptible on the ground colour.

The VERDIN of Cochin China.

Turdus Cochinchinensis, Gmel.

The Black-chinned Thrush, Lath.

THE name of this bird sufficiently marks its predominant colour. The green is shaded with a tinge of blue on the tail, on the outer edge of the great quills of the wings, and on the small coverts near the back. The throat is velvet black, except the two small blue spots which appear on both sides of the lower mandible. This black extends behind the corners of the mouth, and rises on the upper mandible, where it occupies the space between its base and the eye, and below it is surrounded by a sort of yellow high cape that falls on the breast; the belly is green, the bill black, and the legs blackish. This bird is nearly of the size of the Goldfinch. I could not measure its length, because the tail was not fully grown when the bird was killed.

The bill is ten lines in length, and appears shaped like that of the Blackbirds, its edges being scalloped near the point. This little Blackbird is certainly a native of Cochin China, for it was found in the same box with the Musk Animal, sent directly from that country.

The A Z U R I N.

THIS bird is undoubtedly not a Blackbird, for it has neither the appearance nor the shape of one. However, there is some resemblance in the form of the bill, the legs, &c. It has been called the *Guiana Blackbird*. I wait till travellers, ardent in the pursuit of Natural History, make us acquainted with its true name, and, above all, with its habits. To judge from the little that is known of it, that is, from its external appearance, I should range it between the Jays and the Blackbirds.

Three broad bars of fine velvet black, parted by two bars of orange-yellow, cover entirely the upper-part and the sides of the head and of the neck. The throat is pure yellow, the breast decorated with a large blue plate; all the rest of the lower-part of the body, including the inferior coverts of the tail, is radiated transversely with these two last colours, and the blue appears alone on the quills of the tail, which are tapered. The upper-part of the body from the origin of the neck, and the nearest coverts of the wings, are of a reddish brown; the most remote coverts are black, as are also the wing-quills: but some of the first have besides a white spot, whence rises a stripe of the same colour,

deeply indented, and which runs almost parallel to the margin of the closed wing. The bill and legs are brown.

This bird is rather larger than a Blackbird; its whole length is eight inches and a half, its tail is two and a half, its bill twelve lines, and its legs eighteen. The wings, when closed, reach almost to the middle of the tail.

The SHORT TAIL.

Les Brevés, Buff.

NATURE has established important distinctions between these birds and the Black-birds; and I therefore do not hesitate to range them separately. The shortness of the tail, the thickness of the bill, and the length of the legs, are characteristic features; and these must involve other differences in their port, their habits, and perhaps in their dispositions.

We are acquainted with only four birds of this species; I say species, for the resemblance in the plumage is so exact, that they must be regarded as varieties only of a common stem. In all of them the neck, the head, the tail, are black or partly black; the upper-part of the body is green of various intensity; the superior coverts of the wings and tail are of a fine beryl colour, with a white or whitish spot on the great quills of the wing; lastly, in all, except that of the Philippines, the lower part of the body is yellow.

I. The SHORT-TAIL PHILIPPINE*. Its head and neck are covered with a sort of cowl entirely black, the tail of the same colour; the under-part of the body, including the coverts and the small quills of the wings nearest the back, of a deep green; the breast and the top of

* *Corvus Brachyurus*, var. 1. Gmel. *Merula Viridis Africana*: *Pitta Moluccensis*, Briss.

the belly of a lighter green ; the lower belly and the coverts of the tail of a rose colour ; the great quills of the wings black at their origin and at their extremity, and marked with a white spot between the two ; the bill yellowish brown, and the legs orange.

The whole length of the bird is only six inches and a quarter, because of its short tail ; but it is more than eight inches, when measured from the point of its bill to the end of its feet. It is nearly as large as the common Blackbird ; its wings are twelve inches across, and reach beyond the tail, which is only twelve lines long ; the legs are eighteen.

II. The SHORT TAIL which Edwards has figured, Pl. 324, by the name of *Short-tailed Pie of the East-Indies* *. Its head is not entirely black ; it has only three bars of that colour rising from the base of the bill, the one stretching over the top of the head and behind the neck, and each of the others passing under the eye, and descending on the sides of the neck. The two last bars are parted from the middle one by another bar, which is divided lengthwise by yellow and white ; the yellow being contiguous to this middle bar, and the white contiguous to the black lateral bar. Also, the under-part of its tail and the lower belly are rose-coloured, like the preceding ; but all the rest of the under-part of the body is yellow, the throat white, and the

* *Corvus Brachyurus*, var. 2. Gmel. *Coturnix Capensis*, Klein. *The Madras Jay*, Ray. *The Bengal Quail*, Albin.

tail edged with green at the end. It was brought from the island of Ceylon.

III. The SHORT TAIL of Bengal *. Like the first it has the head and neck covered with a black cowl, but on this two large orange-coloured eye-brows are distinctly defined: all the under-part of the body is yellow, and what was black in the great quills of the wing in the two preceding birds, is in this of a deep green, like the back. This bird is somewhat larger than the first, and of the size of an ordinary Black-bird.

IV. The SHORT TAIL of Madagascar †. The plumage of its head is also different from what we have just seen; the crown is of a blackish brown, which assumes a little yellow behind and on the sides; the rest is bounded by a half collar, which is black, and encircles the neck behind at its origin; and by two bars of the same colour, which rising from the extremity of this half collar, pass under the eyes, and terminate at the base of both mandibles; the tail is bordered at the end with a beryl colour; the wings are like those of the first; the throat is mottled with white and yellow, and the under-part of the body is of a colour between yellow and brown.

* *Corvus Brachyurus*, Gmel. *Merula Viridis Moluccensis*, Briss.
The Short tailed Crow, Lath.

† *Corvus Brachyurus*, var. 3. Gmel.

The MAINATE of the East Indies *.

Gracula Religiosa, Linn. and Gmel.

Mainatus, Brisl.

Minor Grakle, Lath.

THE slightest comparison will convince us, that this bird ought to be removed from the Blackbirds, Thrushes, Stares, and Jackdaws, with which it has been hastily ranged, and classed with the *Goulin* † of the Philippines, and especially with the *Martin* ‡, which belong to the same country, and have likewise naked spots on the head. This bird is scarcely larger than a common Blackbird; its plumage is entirely black, but more glossy on the upper-part of the body, the throat, the wings, and the tail, and has green and violet reflexions. What is most remarkable in the bird, is a double yellow comb, irregularly jagged, which rises on each side of the head, behind the eye; the two parts recline and approach each other, and on the back of the head they are parted only by a bar of long nar-

* It is the Indian Stare of Bontius, the *Corvus Javanensis* of Osbeck, and seems to be the *Merula Persica* of Camel, (Philos. Transact. No. 285.) This last author says, that "it is a sonorous and chattering bird, black, but naked about the eyes like the *Illing*, but less so." A few lines below this, *Illing* is written *Iting*, which is our *Goulin*.

† *Bald Grakle*, Lath.

‡ *Paradise Grakle*, Lath.

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THE MINOR GRAKLE

row feathers, which begins at the base of the bill; the other feathers on the crown of the head form a sort of black velvet. The tail, which is eighteen lines long, is yellow, but receives a reddish tinge near the tail; lastly, the legs are of an orange yellow. The tail of this bird is shorter, and the wings longer, than in the common Blackbird; these extend within half an inch of the end of the tail, and measure eighteen or twenty inches across. The tail consists of twelve quills, and of those of the wing, the first is the shortest, and the third the longest.

Such is the Mainate, No. 268, *Pl. Enl.*—But we must own that this species is subject to great variety, both in its plumage, in its size, and in the double comb which characterizes it. Before entering into detail, I shall mention that the Mainate has great talents for whistling, chanting, and even speaking; that its pronunciation is more free than that of the Parrot; that it has been called by distinction the Speaking Bird, and that its garrulity becomes troublesome*.

* Specific character of the *Gracula Religiosa*:—"It is violet black, with a white spot on the wings, and a naked yellow stripe on the back of the head." It is ten inches and a half long, lives upon fruits, cherries, grapes, &c.*

M

VARI.

VARIETIES of the MAINATE.

I. The MAINATE of Brisson. It differs from ours, because it has on the middle of the first quills of the wing a white spot which does not appear in the coloured figure; whether that it did not exist in the subject, or escaped the designer: we may observe that the edge of the first quills is black, even where the white spot crosses them.

II. The MAINATE of Bontius. Its plumage is blue of many tints, and consequently somewhat different from that of ours, which is black, with reflexions of blue; green, violet, &c. Another remarkable difference is, that this blue ground was strewed with specks, like those of the Stare, in point of shape and arrangement, but different with regard to colour; for Bontius subjoins that they are cinereous-gray.

III. The LITTLE MAINATE of Edwards. It has the white spot of Brisson's on its wings; but what distinguishes it sufficiently is, that the two crests uniting behind the *occiput*, form a half crown, which stretches from one eye to the other. Edwards dissected one, which was a female; and notwithstanding the disproportion in point of size, he leaves it to be decided, whether it was not a female of the following:

IV. The

IV. The GREAT MAINATE of Edwards*.

Its crest is the same, as in the preceding, and it differs from that only in size, and in slight variations of colour. It is nearly the bulk of the Jay, and consequently double the preceding, and the yellow of the bill and legs has no reddish tinge.—We are not informed whether the crest of all these Mainates is subject to change of colour, according to the different seasons of the year, and the various passions by which they are actuated.

* *Gracula Religiosa*, var. *Linna.* and *Gmel.* The Greater Minor, *Edw.* and *Lath.*

The G O U L I N *.

Gracula Calwa, Linn. and Gmel.*Merula Calwa Philippensis*, Briss.*The Bald Grackle*, Lath.

THERE are two specimens of this species in the Royal Cabinet. In both, the upper-part of the body is of a light silver-gray, the tail and wings darker, each eye encircled by a bit of skin entirely bare, and forming an irregular ellipse, inclined on its side, the eye being the inner focus: lastly, on the crown of the head is a line of blackish feathers, which runs between these two skins; but one of these birds is much larger than the other. The largest is nearly of the bulk of the common Blackbird; the under-part of its body is brown, varied with some white spots, the naked skin which surrounds the eyes flesh-coloured, the bill, the legs, and the nails, black. In the smaller, the under-part of

* Camel, in the Philosophical Transactions for 1703, says, that the *Goulin* is known in the Philippine islands by the names of *Iting*, *Illing*, and *Tabadura*. He adds, that it is a species of *Palalacay* which is a Great Woodpecker. In this last assertion he is perhaps mistaken; but there is little doubt that his *Gulin* or *Goulin* is the bird now under consideration. His description is as follows:—

“ It is of the bulk of the Stare; its bill, its wings, its tail, and

“ its legs, are black, the rest silvery; the head is naked, except

“ a line of black feathers that runs on the crown. It sings and

“ chatters much.”

the

the body is of a yellowish brown; the bald parts of the head yellow, and also the legs, the nails, and the anterior part of the bill. Poivre informs us, that this naked skin, sometimes yellow, sometimes flesh-coloured, which surrounds the eyes, is painted with a bright orange when the bird is angry; and this must probably happen likewise in the spring, when the bird burns with a passion as impetuous but more gentle. I retain the name of *Goulin*, which it receives in the Philippines, because it is distinguished from the Blackbird not only by the bald part on its head, but by the shape and thickness of its bill.

Sonnerat has brought from the Philippines a bald bird, which resembles much the one figured No. 200, *Pl. Enl.* but differs in the size and plumage. It is near a foot in length; the two bits of naked skin which encircle the eyes are flesh-coloured, and parted from the crown of the head by a line of black feathers, which runs between them. All the other feathers which surround this naked skin are also of fine black; and so is the under-part of the body, the wings, and the tail: the upper-part of the body is gray, but this colour is lighter on the rump and neck, deeper on the back and the loins. The bill is blackish; the wings very short, and scarcely extend beyond the origin of the tail. If the two bald Blackbirds in the Royal Cabinet belong to the same species, we must regard the larger as a young subject, which had not attained its full growth,

growth, or received its true colours; and the smaller as one still younger.

These birds commonly nestle in the holes of trees, especially on the cocoa-nut tree; they live on fruits; and are very voracious, which has given rise to the vulgar notion, that they have only one intestine, which extends straight from the orifice of the stomach to the anus*.

* Specific character of the *Gracula Calva*:—"It is somewhat ash-coloured; its head naked on both sides."

M

The PARADISE GRAKLE.

Le Martin, Buff.*Paradisea Tristis*, Linn: and Gmel.*Gracula Tristis*, Lath. Ind.*Merula Philippensis*, Briss.

THIS bird feeds upon insects, and the havoc which it makes is the more considerable, as it has a gluttonous appetite: the various sorts of flies and caterpillars are its prey. Like the Carrion Crows and Magpies, it hovers about the horses, the oxen, and the hogs, in search of the vermin which often torment these animals to such a degree as to exhaust them, and even occasion death. The patient Quadrupedes are glad to get rid of these, and suffer, without molestation, often ten or twelve Paradise Grakles to perch on their back at once: but the intruders are not content with this indulgence; the skin need not be laid bare by some wound; the birds will peck with their bill into the raw flesh, and do more injury than the vermin which they extract. They may indeed be considered as carnivorous birds, whose prudence directs them to attack openly none but the weak and the feeble. A young one was known to seize a rat two inches long, exclusive of the tail, dash it repeatedly against the board of its cage, break the bones,

bones, and reduce every limb to a pliancy suited to its views; and then lay hold of it by the head, and almost in an instant swallow it entire. It rested about a quarter of an hour to digest it, its wings drooping, and its air languid; but, after that interval, it ran with its usual cheerfulness, and about an hour afterwards, having found another rat, it swallowed that as it did the first, and with as little inconvenience.

This bird is also very fond of grasshoppers; and as it destroys immense quantities, it is a valuable guest in countries cursed with these insects, and it merits to have its history interwoven with that of man. It is found in India and the Philippines, and probably in the intermediate islands; but it has long been unknown in that of Bourbon. Not above twenty years ago, Desforbes-Boucher, Governor-general, and Poivre, the Intendant, perceiving this island desolated by grasshoppers*, deliberated seriously about the means of extirpating these insects; and for that purpose brought several pairs of Paradise Grakles from India, with the view to multiply them, and oppose them as auxiliaries to their formidable enemies. This plan promised to succeed; when unfortunately some of the colonists, noticing these birds eagerly boring in the new-sown fields, fancied that they were searching for grain,

* These grasshoppers had been introduced from Madagascar, their eggs being conveyed in the soil with some plants.

were instantly alarmed, and reported through the whole island that the Paradise Grakle was pernicious. The cause was considered in form: in defence of the birds it was urged, that they raked in new-ploughed grounds, not for the grain, but on account of the insects, and were so far beneficial. However, they were proscribed by the council, and two hours after the sentence was passed, not one was to be found in the island. This prompt execution was followed by a speedy repentance. The grasshoppers gained an ascendancy, and the people, who only view the present, regretted the loss of the Paradise Grakles. De Morave, consulting the inclinations of the settlers, procured four of these birds eight years after their proscription. They were received with transports of joy. Their preservation and breeding were made a state affair; the laws held out to them protection; and the physicians on their part declared that their flesh was unwholesome. After so many and so powerful expedients, the desired effect was produced; the Paradise Grakles multiplied, and the grasshoppers were entirely extirpated. But an opposite inconvenience has arisen; the birds, supported no longer by insects, have had recourse to fruits, and have fed on the mulberries, grapes, and dates. They have even scraped up the grains of wheat, rice, maize, and beans; they have rifled the pigeon-houses, and preyed on the young; and thus, after freeing the settlers from the

VOL. II. c c grass-

grasshoppers, they have themselves become a more dreadful scourge *. Their rapid multiplication renders it difficult to stop their progress; unless perhaps a body of more powerful rapacious birds were employed against them; a plan which would soon be attended with other difficulties. The great secret would be, to maintain a certain number of Paradise Grakles, and, at the same time, to contrive to restrain their farther multiplication. Perhaps an attentive observation of the nature and instincts of grasshoppers, would suggest a method of getting rid of them, without having recourse to such expensive auxiliaries.

These birds are not timorous, and are little disturbed by the report of a musket. They commonly take possession of certain trees, or even certain rows of trees, often very near hamlets, to pass the night. They alight in an evening in such immense bodies, that the branches are entirely covered with them, and the leaves concealed. When thus assembled, they all begin to chatter together, and their noisy society is exceedingly troublesome to their neighbours. Yet their natural song is pleasant, varied, and extensive. In the morning they disperse into the fields, either in small flocks, or in pairs, according to the season.

* * They are still more pernicious, as they devour the useful insects, particularly that called the *Little Lion*, which preys upon the woolly lice that so much injure the coffee-shrubs.

They have two hatches in succession every year, the first being in the middle of spring. These turn out well, unless the season be rainy. Their nests are very rude, and they take no precaution to prevent the wet from penetrating. They fasten them in the leaves of the palm or other trees, and whenever an opportunity presents, they prefer a hay-loft. These birds are warmly attached to their young. When their nests are about to be robbed, they flutter round, and utter a sort of croaking, which indicates their rage, and dart upon the plunderer. Nor do their fruitless exertions extinguish their affection; they follow their brood, which, if set in a window or open place, the parents will carefully supply with food; nor will they in the least be deterred by anxiety for their own safety.

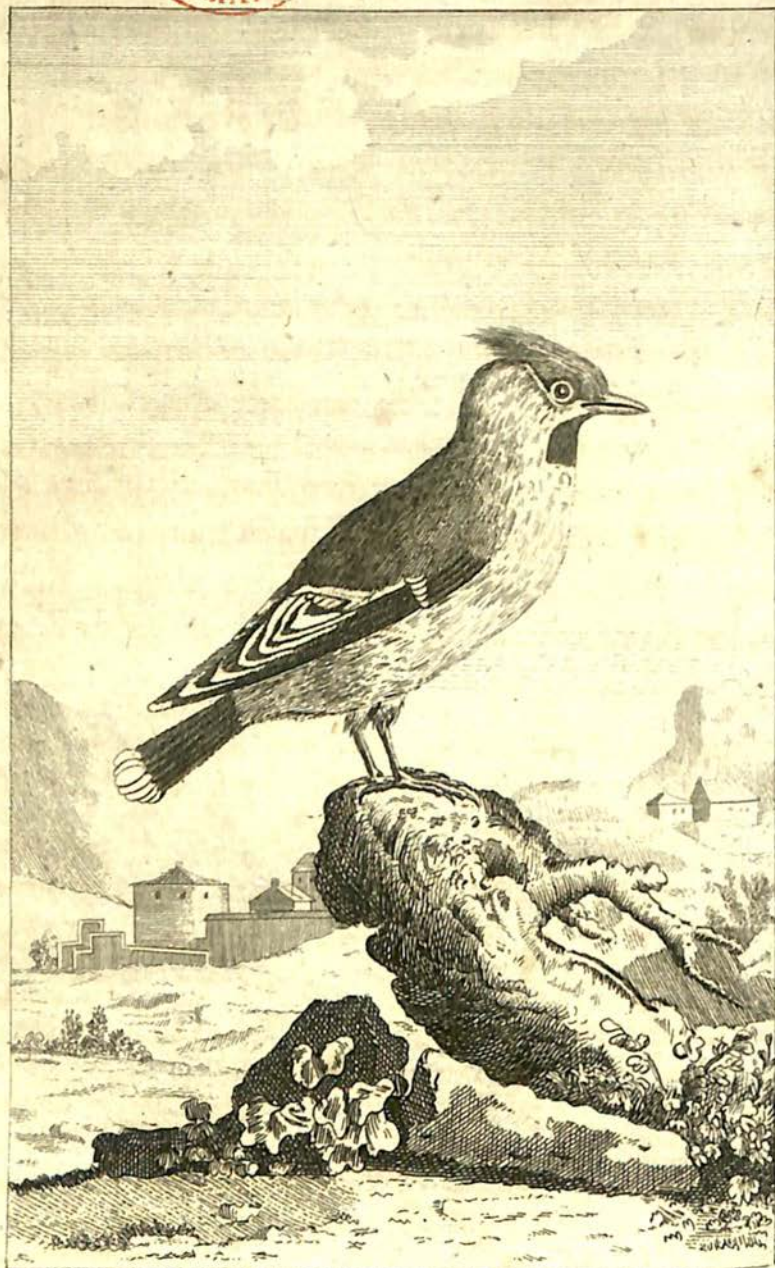
The young Paradise Grakles are quickly trained, and easily learn to prattle. If kept in the poultry-yard, they spontaneously mimic the cries of all the domestic animals, hens, cocks, geese, dogs, sheep, &c. and their chattering is accompanied with certain accents and gestures, which are full of prettinesses.

These birds are rather larger than the Black-birds; their bill and legs are yellow as in these, but longer, and the tail shorter. The head and neck are blackish; behind the eye is a naked reddish skin, of a triangular shape, the lower-part of the breast, and all the upper-part of the
 body,

body, including the coverts of the wings and of the tail, of a chesnut brown; the belly white, the twelve quills of the tail, and the middle quills of the wings brown; the large ones blackish, from the tip to the middle, and thence to their origin white; which produces an oblong spot of that colour near the edge of each wing when it is closed; and in this situation the wings extend to two-thirds of the tail.

It is scarcely possible to distinguish the female from the male, by the external appearance*.

* The principal facts in the history of this bird were communicated by M. M. Sonnerat and De la Nux, correspondents of the Cabinet of Natural History.



THE CHATTERER.

The CHATTERER*.

Le Jaseur, Buff.

Ampelis Garrulus, Linn. and Gmel.

Garrulus Bohemicus, Ray, Will. and Klein.

Bombycilla Bohemica, Briss.

Turdus Cristatus, Frisch.

The Silk Tail, Ray.

The Bohemian Chatterer, Penn. and Lath.

THIS bird is distinguished from all others by the small red appendices which terminate most of the middle quills of the wings; these appendices are nothing but the projection of

* In Aristotle, (lib. ix. 16.) *Τραφαλος*, which signifies a sort of matras or pillow, alluding to the silky feathers of the Chatterer. Aldrovandus gives it the name *Ampelis*, from not the best authority, that of the poet Callimachus. This word, *Ampelis*, was besides applied to other small birds, such as the Beccafico, which, like the Chatterer, feeds upon grapes (*Αμπελος* denotes a wine). Some have reckoned it improperly the *Merops* of Aristotle, which is the *Bee-eater*: others have taken it for the *Avis Incendiaria* of the ancients, or the bird of the Hercynian forest, mentioned by Pliny; though its feathers do not cast fire at night, as alleged of that bird, unless this was a metaphorical allusion to the colour of the Chatterer's eyes, and the tears on its wings. This bird has also been called *Avis Bohemica*, *Adepellus*, *Pteroclia*, *Fullo*, *Gallulus-Sylvestris*, *Zinzirella*, which last is formed from its cry *zi, zi, ri*; and the German name *Zinzerelle* has the same derivation. In that language it is also termed *Boehmer*, *Boehemle*, *Boehmische-Drostel*, *Hauben-Drostel* (hood thrush), *Pest-Vogel* (noxious bird), *Krieg-Vogel* (war-bird), *Wipstertz*, *Scide-Schwantz* (silk-tail), *Schnee-Lesche* (snow quencher), *Schnee-Vogel*: in Swedish, *Siden-Swantz*: in Italian, *Beccofrisone*, *Galletto del Bosco*: in Bohemian, *Brkostarw*: in Polish, *Jedwabniczka*, *Jemiolucha*.

the shafts beyond the webs, which as they spread extend into the shape of a pallet, and assume a red colour. Sometimes as many have been reckoned as eight appendices on each side; some assert that the males have seven, and the females five; others that the females have none at all*. For my own part, I have seen specimens which had seven in the one wing and five in the other; others which had only three; and others which had none; and at the same time exhibited other differences in the plumage. Lastly, I have observed these appendices sometimes parted longitudinally into two branches nearly equal, instead of forming as usual the little pallets of a single piece.

Linnæus has, with great propriety, separated this bird from the Thrushes and Blackbirds; observing, besides the small red appendices which distinguish it, that its proportions are different, its bill shorter, more hooked, and armed with a double tooth or scallop, which appears near the ends of both mandibles†. But it is not easy to conceive why he should range it with the Shrikes, while he admits that it feeds on berries,

* Edwards.

† Dr. Lister asserts that he observed, in one of these birds, that the edges of the upper mandible were not notched near the tip; this may be regarded as an individual variety: but the remark corrected a mistake of the Doctor's, who had, like Linnæus ‡, classed the Chatterer with the Shrikes.

‡ In the *Fauna Suecica*, the Chatterer is termed *Lanius Garrulus*. T.

and

and is by no means carnivorous. There is indeed a considerable resemblance between these and the Shrikes and Red-Backs, in the disposition of the colours, particularly on the head, in the shape of the bill, &c. ; but the difference of instinct is more important, and ought to preclude their association.

It is not easy to determine the native climate of this bird. We should be much deceived, if from the names of Bohemian Jay, Bohemian Chatterer, &c. we inferred with Gesner, Brisson, and others, that Bohemia is its principal abode. It only migrates thither, as into many other countries*. In Austria, it is conceived to be a native of Bohemia and of Stiria, because it enters by the frontiers of these regions ; but in Bohemia it might be called the bird of Saxony, and in Saxony the bird of Denmark, or of other countries on the shores of the Baltic. The English traders assured Dr. Lister, that for near a century past the Chatterers were very common in Prussia. Rzaczynski tells us, that they visit Great and Little Poland and Lithuania. Reaumur was informed from Dresden, that they breed in the neighbourhood of Petersburg. Linnaeus mentions, seemingly on good authority, that they spend the summer, and consequently breed, in the countries beyond Sweden ; but his correspondents did not communicate the detail of

* Frisch.

circumstances. Lastly, Strahlemberg told Frisch that they are found in Tartary in the holes of the rocks, and no doubt they must build their nests in these. But whatever be the country which the Chatterers choose for their residence, where they enjoy the sweets of existence, and transmit them to new generations, it is certain that they are not sedentary, but make their excursions over all Europe. They sometimes appear in the North of England *, in France †, Italy ‡, and no doubt in Spain; but this last is conjectural, for we must own that the natural history of this charming country, so rich and so contiguous, inhabited by a people so renowned, is not better known to us than that of California, or of Japan §.

The migrations of the Chatterers are in every country pretty regular with regard to the season; but if these be annual, as Aldrovandus was told, the birds by no means pursue con-

* The subject figured and described in the British Zoology was killed on Flamborough-Moor, Yorkshire. The two which Dr. Lister saw were killed near the city of York. See Philosophical Transactions, No. 173, Art. 3.

† A few years since a Chatterer was killed at Marcilly near the Ferté-Lowendhal; and lately four were taken at Beaucé in the heart of winter, which had taken shelter in a pigeon-house. See LERNE.

‡ Aldrovandus.

§ Bowles' Natural History of Spain has been since published. T.

Gesner says, that he never saw the Chatterer, and that it is almost every where very rare. We may at least conclude that it is rare in Switzerland.

stantly

stantly the same route. The young Prince Adam d'Aversperg, Chamberlain of their Imperial Majesties, and one of the Lords of Bohemia, who possesses the most extensive chase-grounds, and makes the noblest use of them, since he aims at the progress of Natural History, informs us, in a Memoir addressed to the Count de Buffon*, that this bird flits every three or four years† from the mountains of Bohemia and Stiria, into Austria, in the beginning of the autumn; that it returns about the end of that season; and that, even in Bohemia, not one is seen during the winter. However, it is said, in Silesia, the winter is the time when these birds are found on mountains. Those which have strayed into France and England appeared in the depth of the winter, but always in small numbers: a circumstance which would shew that they were parted from the great body by some accident, and too much fatigued, or too young to recover their route. We might also infer, that France, England, and even Sweden, are not situated in the course of the principal migration; but we cannot draw the same conclusion with regard to Italy, for immense numbers of these birds have there been several times observed to arrive. This was particularly the

* This Prince sent with his Memoir a stuffed Chatterer from his collection, and presented it to the Royal Cabinet.

† Others say every five years, and others every seven years.
GESNER.

case in 1571, in the month of December; at that time it was not uncommon to see flocks of an hundred or more, and forty were often caught at once. The same event took place in February 1530*, when Charles V. caused himself to be crowned at Bologna; for in countries where these birds appear at distant intervals, their visits form an epoch in political history, especially since when they are very numerous, they announce to the frightened imaginations of the people war and pestilence. From these calamities we must, however, except that of earthquakes; for in 1551, when the Chatterers again appeared, it was observed that they spread through Modena, Placentiâ, and almost all parts of Italy†, but constantly avoided Ferrara, as if they had a *presentiment* of the earthquake which happened soon after, and dispersed even the birds of that country.

We cannot well assign the cause that determines these birds to leave their ordinary residence, and to roam into distant climes. It is not excessive cold; for they are embodied for their expedition as early as the beginning of autumn; and besides, their migration is only occasional, happening once in three or four years, or only after six or seven years, and their nume-

* As Italy is warmer than Germany, they might appear there later, and I doubt not but in more northern countries they remain a great part of the winter in years when it is not rigorous.

† Aldrovandus.

rous host often darkens the heavens*. Are we to ascribe these migrations to their prodigious multiplication; like the locusts, and those rats of the north called *lemings*; and, as has happened to the human species, when they were less civilized, and consequently stronger; and more independent of the equilibrium which at length establishes itself between all the powers of nature? Or are the Chatterers compelled repeatedly by local scarcity to quit their abodes, and seek subsistence in other climates? It is said that they penetrate far into the arctic regions; and this is confirmed by Count Strahlenberg, who, as we have already noticed, saw them in Tartary.

When the Chatterer resides in wine countries, it seems fondest of grapes; whence Aldrovandus calls it *Ampelis*, or *Vine Bird*. Next to these, it feeds upon the berries of privet, of bramble, of juniper, of laurel; upon almonds, apples, sorbs, wild gooseberries, figs, and, in general, upon melting juicy fruits. The one which Aldrovandus kept near three months, would not eat ivy-berries or raw flesh till driven to extremity, and never touched grain. That which they tried to breed in the *menagerie* at Vienna was fed upon crumbs of white bread, mashed carrots, bruised hemp-seed, and juniper berries,

* Gesner.

which

which it preferred *; but in spite of all the care which was taken, it lived only five or six days. Not that the Chatterer is difficult to tame, but that a bird, which has roamed at will, and been accustomed to provide its own subsistence, thrives always best in the state of liberty. Reaumur remarks, that the Chatterers love cleanliness, and when confined they constantly void their excrements in the same spot †.

These birds are entirely of a social disposition; they commonly fly in flocks, and sometimes form immense bodies. Beside this general amicable turn, and independent of their attachment to the females, they are susceptible of particular friendships to individuals of the same sex. But their affectionate temper, which implies more gentleness than activity, more security than discernment, more simplicity than prudence, more sensibility than vigour, precipitates them oftener into danger than such as are more selfish. Accordingly, these birds are reckoned the most stupid, and they are caught in the greatest numbers. They are generally taken with the Thrush, which migrates about the same time, and their flesh has nearly the same taste ‡; which is natural to suppose, since they live upon the same food.

* Memoire of the Prince d'Aversperg.

† See Salerne, p. 253.

‡ Gesner tells us that their flesh is very delicate, served up at the best tables, and the liver especially highly valued. The Prince d'Aversperg assures us, that it is better tasted than that of the Thrush and

food. I shall add, that many of them are killed at once, for they sit close together*.

They utter their cry as they rise from the ground; this is *zi, zi, ri*, according to Frisch, and all those who have seen them alive; it is rather a chirrup than a song, and hence their name of *Chatterer*. Reaumur will not even admit that they can chant; but Prince d'Averfperg says that their notes are very pleasant. Perhaps, in countries where they breed, they may warble in the season of love, while they only chirp or chatter in other places; and when confined in cages they may be totally silent.

The plumage is agreeable when the bird is still; but when it displays its wings, expands its tail, and erects its crest, in the act of flying, its appearance is charming. Its eyes, which are of a beautiful red, shine with uncommon lustre in the middle of the black band, in which they are placed. This black extends under the throat, and quite round the bill; the different shades of wine colour on its head, back, and breast, and the ash colour of the rump, are surrounded with a frame enamelled with white, with yellow, and with red, formed by the different spots of the wings and tail: the latter is cinereous at its origin, blackish in its middle, and yellow at its

and Blackbird. On the other hand, Schwenckfeld says that it is very indifferent eating, and unwholesome. This must depend much on the quality of the substances on which the bird feeds.

* Frisch.

end: the quills of the wings are blackish, the third and fourth are marked with white near the tip, the five following marked with yellow, and most of these terminated with broad tears of a red colour, of which I have spoken in the beginning of this article. The bill and legs are black, and shorter in proportion than in the Blackbird. The total length of the bird is, according to Brisson, seven inches and three-quarters, its tail two and a quarter, its bill nine lines, its legs the same, and its alar extent thirteen inches. For my part, I have observed that the dimensions were all greater than here stated; owing, perhaps, to difference of age or sex, or even between the individuals.

I am not acquainted with the plumage of the young Chatterers, but Aldrovandus tells us that the margin of the tail is of a duller yellow in the females, and that the middle quills have whitish marks, and not yellow, as in the males. He adds a circumstance which is hard to believe, though he asserts it from his own observation, that in the females the tail consists of twelve quills, but in the males of ten only. It is much more credible that the male specimens examined by Aldrovandus had lost two of their quills*.

* Specific character of the *Ampelis Garrulus*:—"The back of its head is crested, the secondary wing-quills are membranous, and coloured at the tip."

VARIETY of the CHATTERER.

We may observe that the Chatterer is proportionably much broader across the wings than the Blackbird or Thrushes. Aldrovandus has also remarked, that the *sternum* is of a shape better adapted for cutting the air, and accelerating its course. We need not then be surprised that it performs such distant journies in Europe; and since it spends the summer in the countries of the north, we should naturally expect to discover it in America. And this is actually the case. Reaumur received several from Canada, where they were called *Recollet* *, on account of the resemblance perceived between the crest and a monk's frock. From Canada they could easily spread into the southern colonies. Catesby describes them among the birds of Carolina: Fernandez saw them in Mexico near Tezcucot †: I have examined some which were sent from Cayenne. This bird is not above an ounce in weight, according to Catesby; its crest, when erected, is pyramidal, its bill is black, with a large opening, its eyes placed on a bar of the same colour, separated from the ground by two white streaks, the extremity of the tail edged

* It is the *Caquantotail* of Fernandez.

† He says that it delights to dwell in the mountains, that it lives on small seeds, that its song is ordinary, that its flesh is indifferent food.

with

with a shining white, the upper-part of the head, the throat, and the back, hazel, with a wine-tinge; the coverts and quills of the wings, the lower-part of the back, the rump, and a great part of the tail, of different shades of cinereous; the breast, and the inferior coverts of the tail, whitish; the belly and flanks of a pale yellow. It appears from this description, and from the measures which have been taken, that the American Chatterer is rather smaller than the European sort; that its wings have less of the enamel, and are rather of a duskier hue; and that the wings do not extend so far in proportion as the tail. But it is undoubtedly the same species; for seven or eight middle quills of its wing are terminated by the little red appendices. Brooke, surgeon in Maryland, told Edwards, that the females wanted these appendices, and that the colours of their plumage were not so bright as those of the males. The Cayenne Chatterers which I examined had really not these appendices, and the shades of the plumage were in general fainter, as it commonly happens in the females.

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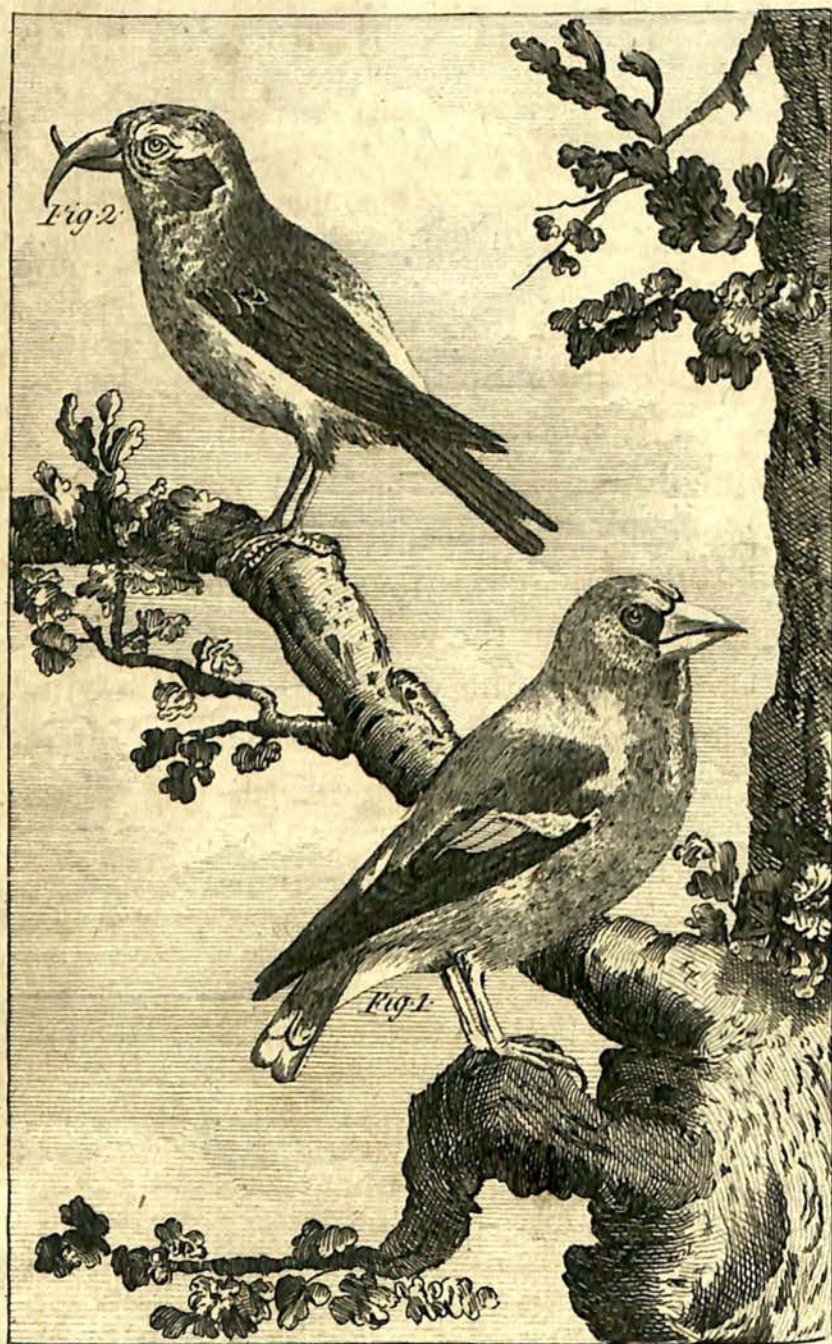


FIG 1 THE HAWFINCH FIG 2 THE COMMON CROSSBILL.

The G R O S B E A K *.

Le Gros-Bec, Buff.

Loxia-Coccothraustes, Linn. and Gmel.

Coccothraustes, Gefner, Aldrov. Briff. &c.

The Grosbeak, or *Harvfinch*, Will. Edw. &c.

THIS bird is an inhabitant of the temperate climates, from Spain and Italy, as far as Sweden. The species, though rather stationary, is not numerous. It appears every year in some of the provinces of France, and leaves them only for a short time in the severest winters†. It generally inhabits in the woods during the summer, and sometimes the vineyards; and in winter it resorts near the hamlets and farms. It is a silent bird which is seldom heard, and seems

* Its Greek and Latin name *Coccothraustes* is derived from κοκκος, a grain or kernel, and θραυω, to break, because it feeds upon cherry-stones: However, that appellation might have been given to some other bird that had the same habit; for Hesychius and Varro, the only ancient authors in whose writings the word is found, say no more than that “the *Coccothraustes* is a certain bird.” In Italy it is called *Frosone*, *Frisone*, *Grisone*, *Franguet del Re*, *Franguet Montano*: in Germany, *Heine-Byffer*,^A *Bollebiek*, *Kirsch-Finck*, *Kern-Beisz*, *Risch-Leske*: in Switzerland, *Klepfer*: in Sweden, *Talbin*.

† It is difficult to reconcile this remark, of which I am certain, with the account given by the authors of the *British Zoology*, that the Grosbeak is seldom seen in England, and never except in winter. Perhaps, as there are few forests in England, there are also few of these birds, which reside only in the woods; and as they approach the hamlets only in winter, observers may never have seen them but in that season.

to have no song or decided warble. Nor is its organ of hearing so perfect as that of other birds, for though it resides in the forests, it cannot be enticed by the call. Gesner, and most naturalists after him, have said, that the Grosbeak is good eating. I have tasted the flesh, but it seemed neither pleasant nor juicy.

I have observed in Burgundy that these birds are much fewer in winter than in summer, and that great numbers of them arrive about the 10th of April in small flocks, and perch among the copses, building their nests * on trees, generally at the height of ten or twelve feet, where the boughs divide from the trunk. The materials are, like those of the Turtle, dry sticks, matted with small roots. They commonly lay five bluish eggs spotted with brown. We might suppose that they breed only once a-year, since the species is not numerous. They feed their young with insects, chrysalids, &c.; and when they are about to be robbed of their family, they make a vigorous defence, and bite fiercely. Their thick strong bill enables them to crack nuts, and other hard substances; and though

* A Grosbeak's nest was found the 24th of April 1774, on a plum-tree ten or twelve feet high, in the fork of a branch; it was of a round-hemispherical shape, composed externally with small roots and some lichens, and internally with other small roots more slender; it contained four eggs somewhat pointed, their great diameter nine or ten lines, their small diameter six lines; they were marked with spots of an olive brown, and with irregular blackish streaks faintly impressed on a ground of bluish-light-green. Not communicated by *M. Gueneau de Monbeillard*.

they are granivorous, they also live much upon insects. I have kept them a long time in voleries; they reject flesh, but readily eat any thing else. They must be confined in a separate cage, for without seeming at all discomposed, or making the least noise, they kill the weaker birds that are lodged with them. They attack, not by striking with the point of the bill, but by biting out a morsel of the skin. When at liberty, they live upon all sorts of grain, and kernels of fruits; the Orioles eat the pulp of cherries, but the Grosbeaks break them to obtain the kernel; they feed also on fir and pine cones, and on beech mast, &c.

This bird is solitary, shy, and silent; its ear is insensible, and its prolific powers are inferior to those of most other birds. It seems to have its qualities concentrated in itself, and is not subject to any of the varieties which almost all proceed from the luxuriance of nature. The male and female are of the same size, and much resemble each other. The species is uniform in our climate; but in foreign countries there exist many analogous birds, which shall be enumerated in the succeeding article*. [A]

* The upper-mandible is cinereous, but of a lighter tint near the base; the lower-mandible is cinereous at the edges which close into the upper; its under-side is flesh-coloured, with a cinereous cast. The tongue is fleshy, small, and pointed; the gizzard is very muscular, preceded by a pouch, containing, in summer bruised hemp-seeds, green caterpillars almost entire, and very small.

small stones. In a subject which I dissected lately, the intestinal tube from the *pharynx* to the *cæcum* was three inches and an half long, and from the gizzard to the *anus* about a foot. It had no *cæcum* or gall-bladder. *Observations communicated by M. Gueneau de Montbeillard, the 22d April 1774.*

[A] Specific character of the *Loxia Coccythraustes*:—"It has a white line on the wings, the middle quills of the wings are rhomboid-shaped at the tips, the quills of the tail are black on the thinner side of the base."

The C R O S S B I L L *.

Le Bec Croisé, Buff.

Loxia Curvirostra, Linn. and Gmel.

Loxia, Gefner, Aldrov. Briff. &c.

The Shell-Apple, or *Crossbill*, Will. Edw. &c.

THE species of the Crossbill is closely related to that of the Grosbeak. Both have the same size, the same figure, the same instincts †. The Crossbill is distinguished only by a sort of deformity in its bill, a character, or rather a defect, which belongs to it alone of all the winged tribe. What proves that it is a defect, an error of nature rather than a permanent feature, is, that it is variable; the bill in some subjects crosses to the left, in others to the right; but the productions of nature are regular in their developement, and uniform in their arrangement. I should therefore impute this difference of position to the way in which the bird has used its bill, according as it has been more accustomed to employ the one side or the other to lay hold of its food. The same takes place in men, who,

* Gefner gave it the name *Loxia*, from the Greek λοξος, *oblique*, on account of the crossing of its bill. In Germany it is called *Kreutz-Schnabel* (Crossbill), *Kreutz-Vogel*: in Poland, *Rzywnos*: in Sweden, *Korsnaef*, *Kiaegelrifware*.

† Frisch conceives them to be so nearly allied, that they would breed together.

from habit, prefer the right hand to the left *. Each mandible of the Crossbill is affected by an exuberance of growth, so that in time the two points are parted asunder, and the bird can take its food only by the side; and hence if it oftener uses the left, the bill will protrude to the right, and *vice versa*.

But every thing has its utility, and each sentient being learns to draw advantage even from its defects. This bill, hooked upwards and downwards, and bent in opposite directions, seems to have been formed for the purpose of detaching the scales of fir-cones, and obtaining the seeds lodged beneath these, which are the principal food of the bird. It raises each scale with its lower mandible, and breaks it off with the upper; it may be observed to perform this manœuvre in its cage. This bill also assists its owner in climbing, and it dextrously mounts from the lower to the upper bars of its cage. From its mode of scrambling, and the beauty of its colours, it has been called by some *the German Parrot*.

* This observation must be qualified. If habit were the sole cause of this difference, as many people would be left-handed as right-handed. But the number of the former is very small, compared with that of the latter, and therefore the right-hand must by original constitution be stronger than the left, however much the difference is afterwards increased from habit. The same reasoning seems applicable to the Crossbill. T.

The Crossbill inhabits only the cold climates, or the mountains in temperate countries. It is found in Sweden, in Poland, in Germany, in Switzerland, and among the Alps and Pyrenees. It is quite stationary in countries where it lives the whole year; but sometimes it accidentally appears in large flocks in other regions. In 1756 and 1757, great numbers were seen in the neighbourhood of London. They do not arrive at stated seasons, but seem to be rather directed by chance, and many years pass without their being at all observed. The Nut-Crackers, and some other birds, are subject to the same irregular migrations, which occur only once in twenty or thirty years. The only cause which can be assigned is, that they have been deprived of their usual subsistence in the climates where they inhabit, by the inclemency of the season; or have been driven upon the coast by the violence of a storm or hurricane: for they arrive in such numbers, and appear so much exhausted, that they are careless of their existence, and allow themselves to be caught by the hand.

We might presume that the species of the Crossbill, which prefers the cold climates, would be found in the north of the New Continent; as in that of the Old: yet no traveller to America has taken notice of it. But besides the general presumption which is verified by analogy; there is a fact which seems to prove our opinion; the

Crossbill is found in Greenland, whence it was brought to Edwards by the whale-fishers; and that naturalist, who was better acquainted than any person with the nature of birds, remarks properly, that both the land and the water sort which inhabit the arctic regions, appear indifferently in the north of America or of Europe.

The Crossbill is one of those birds, whose colours are the most subject to vary; among a great number we can scarcely find two individuals that are exactly similar; not only are the shades of the plumage different, but the position of the colours change with the season and the age. Edwards, who examined a prodigious number of them, and sought to mark the limits of variation, paints the male with a rose colour, and the female with a yellowish green; but in both, the bill, the eyes, the thighs, and the legs, are precisely the same in regard to shape and colours. Gesner tells us that he kept one of these birds, which was blackish in September, and assumed a red colour in October. He adds, that the parts where the red began to appear, were the under-side of the neck, the breast, and the belly; that this red afterwards became yellow, and that winter especially is the season when these changes take place, and that, at different times, it is said they receive a red, yellow, green, and cinereous cast. We must not, therefore, with our modern nomenclators, reckon as a separate species, or a particular variety, a
greenish

greenish Crossbill *, found in the Pyrenees, since it occurs equally in other places; and in certain seasons it has in all countries that colour. According to Frisch, who was perfectly acquainted with these birds, which are common in Germany, the colour of the adult male is reddish, or green mixed with red; but they lose this red, like the Linnets, when they are kept in the cage, and only retain the green, which is more deeply impressed both in the young and in the old. For this reason they are called in some parts of Germany *krinis* or *grünitz*, that is, greenish bird. The two extreme colours have not therefore been well chosen by Edwards; we must not infer, as his figures would suggest, that the male is red, and the female green; there is every reason to believe, that in the same season, and at the same age, the female differs from the male only in the greater faintness of the colours.

This bird, which is so analogous to the Grosbeak, resembles it also in stupidity. One may approach it, fire upon it without scaring it, and sometimes even catch it by the hand; and as it is equally inactive and secure, it falls an easy victim to all the birds of prey. It is mute in summer, and its feeble notes are only heard in winter. It is quite placid in captivity, and

* *Loxia Pyrenaica*, Barrere. *Loxia Rufescens*, Brisson.

† GILNER.

lives long in a cage. It is fed with bruised hemp-seed, and this contributes to make it sooner lose its red *. In summer, its flesh is said to be good eating †.

These birds delight only in the dark forests of pines and firs, and seem to dread the effulgence of day. Nor do they yield to the genial influence of the seasons; it is not in spring, but in the depth of winter, that their loves commence. They build as early as January, and their young are grown before the other birds begin to lay. They place their nests under the large branches of the pine, fixing them with the resin of that tree, and besmearing them with that substance, so that the melted snow or the rains cannot penetrate. In the young, as in those of other birds, the bill, or rather corners of its opening, are yellow, and they hold it always open as long as they are fed by the mother. We are not told how many eggs they lay, but we may presume, from their size and their resemblance to the Grosbeak, that the number is four or five, and that they hatch only once a-year. [A]

* Frisch.

† Gesner and Frisch.

[A] Specific character of the Crossbill, *Loxia Curvirostris* LINN.—“It is red, its bill forked.” It is of the size of a Lark, being six inches and a half long.

FOREIGN BIRDS, THAT ARE RELATED TO THE GROSBEAK.

I.

THE East-India bird, delineated in the *Pl. Enl.* No. 101, fig. 1. under the name of *Coromandel Grosbeak*, and which name we have still retained, because it appears to be the same species with that of Europe. The shape, the size, the bill, the length of the tail, are the same in both, and the only difference consists in the colours, which are also disposed in the same order. In short, we may impute the difference of shade to the influence of climate, and consider this Coromandel bird, which no naturalist has taken notice of, as a beautiful variety of the European Grosbeak.

II.

The American bird, No. 154, *Pl. Enl.* termed *the Blue American Grosbeak*, on which we have bestowed no discriminating name, because we
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are not certain if it is a peculiar species, different from that of Europe; for in size and figure it is the same with our Grosbeak. The only difference is, that it has more red on its bill, and more blue in its plumage; and if its tail were not longer, we should not hesitate to pronounce that it is a mere variety, occasioned by the influence of climate. No naturalist has noticed this new variety or species, which we must be careful not to confound with the Carolina bird, called by Catesby *the Blue Grosbeak*.

III.

The H A R D - B I L L.

Le Dur-Bec, Buff.

Loxia Enucleator, Linn. and Gmel.

Coccothraustes Canadensis, Briss.

The Greatest Bulfinch, Edw.

The Pine Grosbeak, Penn. and Lath.

The Canada bird, delineated *Pl. Enl.* No. 135, fig. 1. under the name of *Canada Grosbeak*, and which we have called *Hard-bill*, because its bill is comparatively harder, shorter, and stronger, than in the others; and it was proper to apply to it a distinct name, since it differs not only from the European Grosbeaks, but from all those of America and of other climates. It is of a beautiful red, as large as our Grosbeak,

but longer tailed, and may be easily distinguished from all the other birds by the inspection of the coloured figure. The female has only a little reddish on its head and rump, and a slight tinge of rose-colour on the lower-part of its body. Salerne tells us, that in Canada this bird is called *bouvreuil* (*Bulfinch*). This name has not been ill applied, for there is perhaps an affinity between it and the Bulfinch. The inhabitants of that part of America could decide this point by a very simple observation, *viz.* by noticing whether it whistles almost continually like the Bulfinch, or is almost mute like the Grosbeak *.

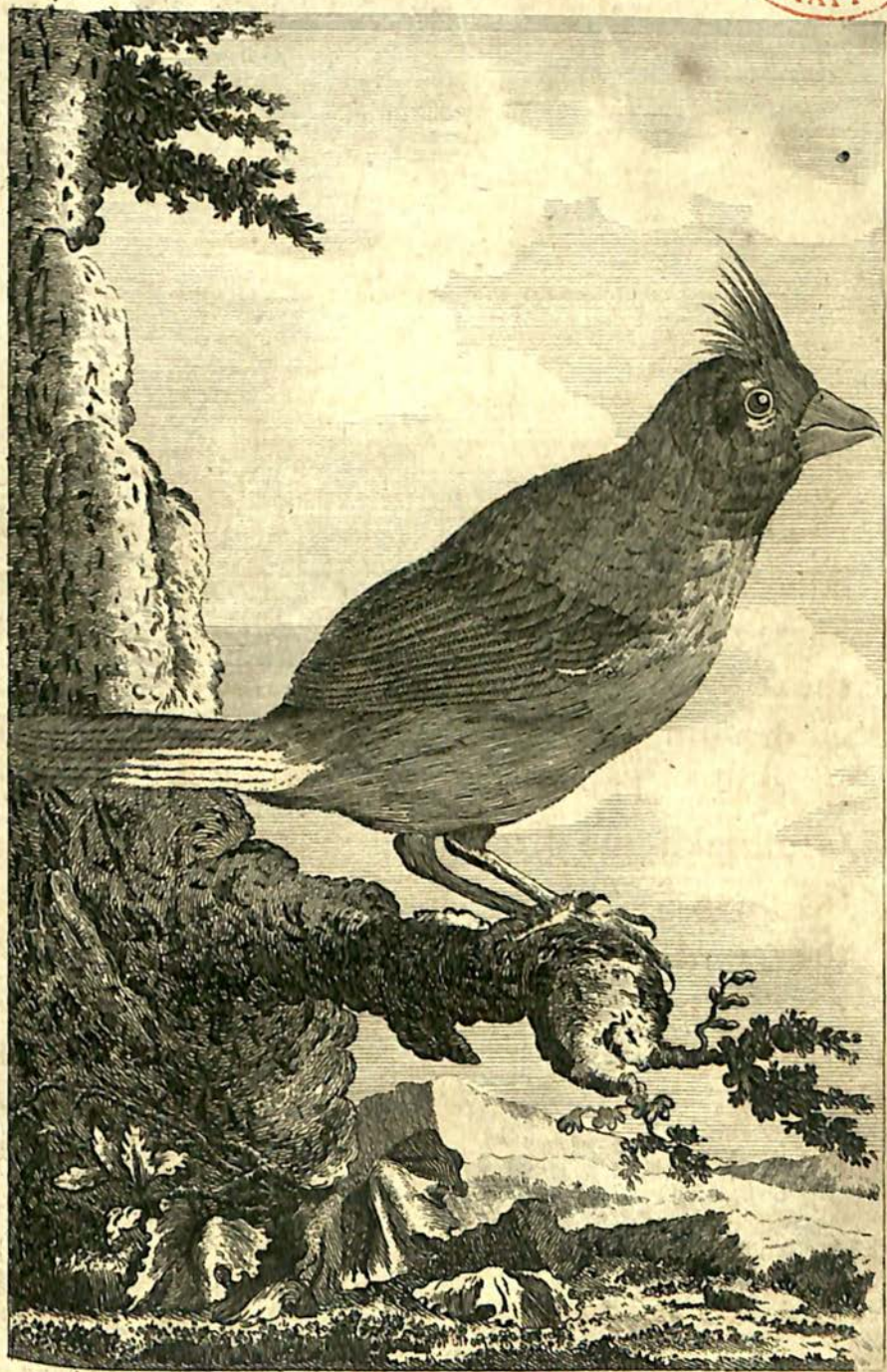
* Specific character of the *Loxia Enucleator* :—" It has a double white line on the wings, and all the quills of its tail are blackish."—It is about nine inches long. Found in all the northern parts of America, from Canada to the western side of the continent. It arrives in Hudson's Bay early in the spring; lodges among the pines and junipers; builds its nest at a small height from the ground; lays four eggs, which it hatches in June. These birds occur also in the north of Europe and Asia. They are frequent in Russia and Siberia; and Mr. Pennant tells us that he saw them in the pine forests near Invercauld, Aberdeenshire, in the month of August.

IV.

The CRESTED CARDINAL.

Le Cardinal Huppé, } Linn. and Gmel.
Loxia Cardinalis, }
Coccothraustes Virginiana, Briss.
Coccothraustes Indica Cristata, Ray, and Will.
The Red Grosbeak, Albin.
The Red Bird, Kalm's Travels.
The Virginia Nightingale, Will.
The Cardinal Grosbeak, Penn. and Lath.

This is a native of the temperate climates of America, and figured No. 37, *Pl. Enl.* by the name of the *Virginia Grosbeak*. It is also called the *Crested Cardinal*, which name we retain, as denoting its two characters, its colour, and its crest. This bird resembles much the Pine Grosbeak; the size, and, in a great measure, the plumage, are the same; the bill is as strong, the tail of the same length, and the climate is nearly the same. We might, therefore, but for the crest, reckon it a variety of that beautiful species. The colours in the male are much brighter than in the female, whose plumage is not red, but only reddish-brown; its bill is also of a much fainter red, though both have the crest. I should range this bird rather with the Bulfinch and the Chaffinch, than with the Grosbeak, since it sings agreeably; whereas the Grosbeak is silent. Salerne says, that the warble of the



THE CRESTED CARDINAL.

the Crested Cardinal is charming, and resembles the song of the Nightingale; and that it can be taught also to speak like the Canary birds. He adds, that this bird, which he observed alive, is bold, strong, and vigorous, that it feeds upon seeds, particularly those of millet, and is easily tamed *.

* Specific character of the *Loxia Cardinalis*:—"Its head is red, its bridle black, its bill and legs blood-coloured." It is nine inches long: is found through the whole extent of North America. It feeds chiefly on Indian corn, of which it makes a provision for the winter, artfully concealing the deposit with leaves and small branches. It warbles delightfully in the spring mornings on the summits of the loftiest trees. Its song is said to resemble that of the Thrush. It is a hardy and familiar bird,

The four birds which we have just mentioned are all nearly of the same size with the European Grosbeak. But there are many other intermediate or smaller species, which we shall range according to their size and climate, and which, though all different from each other, may best be compared with the Grosbeaks, to which they are more analogous than to any other. We may name them the *Middle Grosbeaks* and the *Little Grosbeaks*.

V.

The ROSE-T H R O A T.

Loxia Ludoviciana, Linn. and Gmel.*Coccothraustes Ludoviciana*, Briss.*The Red-breasted Grosbeak*, Penn. and Lath.

The first of these species of the middle size is that of the *Pl. Enl.* No. 153, fig. 2. termed *the Grosbeak of Louisiana*. Its throat is of a fine red rose colour, and differs so much from all other species of the same genus, that it merits a distinct name. Brisson first mentioned this bird, and has given a tolerably good figure of it; but he says nothing of its habits. The settlers in Louisiana could inform us *.

* Specific character of the *Loxia Ludoviciana* :—" It is black; its breast, its belly, the stripe on its wings, and the base of its tail-quills, are white." The female is spotted with white on the head. It inhabits the greater part of North America: In the State of New-York it is reckoned a scarce bird. It appears there in May, and retires in August.

VI.

The G R I V E L I N.

Loxia Brasiliiana, Lath.

The second species of the middling Grosbeaks is Fig. 1. No. 309, *Pl. Enl.* and there termed

termed the *Brazilian Grosbeak*. We have given it the name of *Grivelin*, because the under-part of its body is speckled like as in the Thrushes (*grives*). As it is a beautiful bird, and unlike any other, it merited an appropriated name. It seems to be much related to the bird mentioned by Marcgrave, and which is called in Brazil *Guira, Tirica*. However, as the short description given by that author does not exactly correspond with our *Grivelin*, we cannot decide with regard to the identity of the species.

These middle-sized species, and those still smaller, are much more like the Sparrow in point of bulk and shape; but we have allowed them to remain with the Grosbeak, because their bill resembles that of these birds, and is much broader at the base than that of the Sparrow.

VII.

The RED BLACK.

The third species of the middle-sized Grosbeak is the bird delineated Fig. 2. No. 309. *Pl. Enl.* under the name of the *Cayenne Grosbeak*. We have called it the *Red Black*, because the whole of its body is red; and the breast and belly black. This bird, which is brought from Cayenne, has been noticed by no naturalist; but

as we did not see it alive, we cannot describe its habits. The people of Guiana could instruct us in that point.

VIII.

The FLAVER T*.

Loxia Canadensis, Linn. and Gmel.

Coecothraustes Cayanensis, Briss.

The Canada Grosbeak, Penn. and Lath.

The fourth species of these foreign middle-sized Grosbeaks is the bird Fig. 2. No. 152. *Pl. Enl.* termed *the Cayenne Grosbeak*. It is yellow and green, and therefore differs from the preceding almost as much as it can do with regard to colours; but as its size, the shape of its body and of its bill, and its climate, are the same, we may reckon it a species closely related to the Red Black, if it be not a variety arising merely from the difference of age or sex. Brisson is the first who took notice of it. [A]

* *i. e.* The yellow-green.

[A] Specific character of the *Loxia Canadensis*:—"It is olive-green, above olive-yellow, its bridle black."

IX.

The FAN-TAILED GROSBEAK.

La Queue en Eventail, Buff.*Loxia Flabellifera*, Gmel.

The fifth species of these birds is that figured *Pl. Enl.* No. 380. under the name of *the Fantail of Virginia*. We received it from that part of America, and it has not been noticed by any preceding author. The upper figure, No. 380. represents probably the male, and the under the female; for its colours are not so vivid. We received these birds alive, but not being able to preserve them, we could not decide whether we should attribute the differences to sex or to age. They are so remarkable for the shape of their tail, which is expanded horizontally, that this character alone is sufficient to distinguish them from others of the same genus*.

* Specific character of the *Loxia Flabellifera*:—"It is dusky-red, which below is more dilute; its bill, its wing-quills, its tail, and its legs, are black." It is five inches long.

X,

The PADDA, or RICĒ-BIRD.

Loxia Oryziuora, Linn. and Gmel.*Coccothraustes Sinensis Cinerea*, Briss.*The Java Grosbeak*, Lath.

The sixth species is the Chinese bird, described and figured by Edwards, and which he names *Padda*, or *Rice-Bird*, because the Chinese call rice in the husk *padda*, which is the food of this bird. This author has painted two of these birds, and supposes, with great probability, that *Pl.* 41 represents the male, and *Pl.* 42 the female. We had a male of this species, which is delineated *Fig. 1. No. 152. Pl. Enl.* It is an exceedingly beautiful bird; for besides the lustre of the colours, its plumage is so perfectly regular, that no feather projects beyond another, but they appear covered entirely with down, or rather with a sort of meal, such as we perceive in plums, which produces a fine gloss. Edwards adds little to the description of this bird, though he saw it alive. He says only that it is very destructive among the plantations of rice; that the traders to the East-Indies call it *the Javan, or Indian Sparrow*; that this appellation would imply that it is found in the East-Indies, as well as in China; but he is rather disposed to think that

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the Europeans, in their intercourse between China and Java, had often carried these birds to that island; and lastly, that what proves them to be natives of China is, they are painted on the Chinese paper and muslins.

The species which we are now to describe are smaller than the preceding, and consequently differ so much from our Grosbeaks, that we could hardly refer them to the same genus, did not the shape of their bill, the figure of their body, and even the order and position of its colours, indicate that these birds, though not exactly Grosbeaks, are still nearer related to them than to any other genus.

XI.

The TOUCNAM COURVI.

Loxia Philippina; Linn. and Gmel.

Coccothraustes Philippensis, Briss.

The Philippine Grosbeak, Lath.

The first of these small foreign Grosbeaks is the *Toucnam Courvi* of the Philippines, of which Brisson has given a description, with a figure of the male, under the name of *the Philippine Grosbeak*, and which is delineated Fig. 2. No. 135. *Pl. Enl.* by that denomination. But we have

here preserved the name which it receives in its native climate, because it differs from all the rest. The female is of the same size with the male, but its colours are different, its head being brown, and also the upper-part of its neck, which in the male is yellow, &c. Brisson gives also a figure and description of their nest *. [A]

* These birds construct a nest of a singular form. It is composed of little interwoven fibres of leaves, which form a sort of small pouch, whose mouth is placed in one of the sides. To this mouth is fitted a long passage, composed of the same leafy fibres, turned downwards, with its aperture situated below, so that the real entrance to the nest is entirely concealed. These nests are fastened by their upper-part to the small branches of trees. BRISSON.

[A] Specific character of the *Loxia Philippina* :—" It is dusky, " below yellowish-white, the top and breast yellow, the throat " dusky."

XII.

The ORCHEF.

Loxia Bengalenfis, Linn. and Gmel.

Passer Bengalenfis, Briss.

The Bengal Sparrow, Alb.

The Yellow headed Indian Sparrow, Edw.

The Bengal Grosbeak, Lath.

The second of these little foreign Grosbeaks is the East-India bird delineated *Pl. Enl.* No. 393. Fig. 2. under the name of *Indian Grosbeak*. I have termed it *gold-head (Orchef)* because

cause the upper-part of its head is of a fine yellow, and being different from all the rest, required a distinct name.—This species is new, and has not been noticed by any preceding naturalist*.

* Specific character of the *Loxia Bengalenfis*:—"It is gray, "with a yellow cap; its temples whitish, its lower-belly whitish, "spotted with dusky." It is somewhat larger than the House Sparrow.

XIII.

The NUN GROSBEAK.

Loxia Collaria, Linn. and Gmel.

Le Gros Bec Nonette, Buff.

The third of these little-species is that of Fig. 3. No. 393. *Pl. Enl.* which we have called *the Nun*, because it has a sort of black biggen on its head. It is a new species also; but we can say nothing more of it, being unacquainted with its native climate. We bought it from a dealer in birds, who could give us no information on that subject†.

† Specific character of the *Loxia Collaria*:—"It is yellowish, "its breast and collar yellow, its temples black."

XIV.

The GRAY GROSB EAK.

Loxia Grisea, Gmel.

The fourth of these is new, and as little known as the preceding. It is Fig. 1. No. 393, *Pl. Enl.* called *the Virginia Grosbeak*. But we shall term it *grey-white*. (*Grisealbin*), because its neck and part of its head is white, and all the rest of the body gray; and as it differs from the others, it merits an appropriated name*.

* Specific character of the *Loxia Grisea*:—"It is of a cœrulean gray, its neck and front white." It is four inches long.

XV.

The QUADRICOLOR.

The fifth of these little-foreign Grosbeaks is the bird described by Albin, under the name of *the Chinese Sparrow*, and afterwards by Brisson †, under that of *the Java Grosbeak*, and delineated Fig. 2. No. 101. *Pl. Enl.* by the same name. We shall, however, term it *the Quad-*

† The female; says this author, differs from the male, its thighs being of a light-chestnut, and the colour of its tail not so vivid.

dricolor,

dricolor, to distinguish it from all the rest, and mark its principal colours; for it is a beautiful bird, and painted with four brilliant colours; the head and neck being blue, the back, the wings, and the end of the tail, green; there is a broad red bar, like a girth, under the belly, and on the middle of the tail; and lastly, the rest of the breast and belly is light-brown or hazel. We are ignorant of its habits.

XVI.

The JACOBINE, and the DOMINO*.

Loxia Malacca, Linn. and Gmel.

Coccothraustes Moluccensis, Briss.

The Molucca Grosbeak, Lath.

The sixth of these is the bird known to the curious by the name of *Jacobine*, which we retain as applicable and discriminating. It is represented *Pl. Enl.* Fig. 3. No. 139. and titled "The Java Grosbeak, called the Jacobine." We conceive that Fig. 1. of that plate, termed *the Molucca Grosbill*, is of the same species, and probably a female of the first. We have seen these birds alive, and fed them like Canaries. Edwards describes and figures them by the name

* Specific character:—"It is dusky; its head, its throat, its tail-quills, black; below it is waved with black and white,"

of *Coury**, Pl. XL. and from the meaning of this word, he infers that they inhabit India, and not China†. We would have adopted this term, had not that of *Jacobine* already come into use. Fig. 2. No. 139. and Fig. 1. No. 153. are two birds which the virtuosi call *Dominos*, and which they distinguish from the *Jacobines*. They are smaller indeed, but ought to be regarded as varieties of the same species. The males are probably those which have the belly spotted, and the females those which have it of an uniform white-gray. The description of them occurs in Brisson's work, but not a word is said of their natural habits.

* It is called a *Cowrie*, because its ordinary price is one of the small shells which pass in India for money; but these are not current in China..

† It is the *Loxia Punctularia* of Linnæus, the *Coccothraustes Javaensis Ngavia* of Brisson. Specific character: "It is bay-coloured; its lower-belly black, spotted with white." It is four inches and a half long.

XVII.

The BAGLAFECHT.

Loxia Philippina, var. Gmel.

This is an Abyssinian bird, much resembling the *Toucnam Courvi*; the only difference consisting in the shades or arrangement of the colours.

lours. The black-spot which is on both sides of the head rises in the Baglasecht above the eyes; the brown and yellow marbling of the upper-part of the body is less marked, and the great coverts of the wings and their quills; those of the tail are greenish-brown, edged with yellow. Its iris is yellowish, and its wings, when closed, reach near the middle of the tail.

The Baglasecht resembles the Toucnam Courvi also in the precautions which it takes to secure its eggs against rain, and every sort of danger; but the form of its nest is different. The bird rolls it into a spiral nearly like the *Nautilus*, and suspends it, as does the Toucnam Courvi, at the extremity of a small branch, almost always above stagnant water, the aperture constantly turned to the east, the quarter opposite to the rain. In this way the Baglasecht is not only sheltered from the wet, but secured from the intrusions of different sorts of animals, which seek to feed upon its eggs.

 IV

XVIII,

The ABYSSINIAN GROSBEAK..

Loxia Abyssinia, Gmel.

I range among the Grosbeaks also the Abyssinian bird, which resembles them in the characteristic

characteristic feature, the thickness of its bill, and likewise in the size of its body. Its iris is red, its bill, the top and sides of its head, its throat, and its breast, are black; the rest of the under-part of the body, the thighs, and the upper-part of the body, light yellow, but which assume a brown tinge where the black of the anterior part meets it, as if the two colours there melted into one; the scapular feathers are blackish, the coverts of the wings brown, edged with gray; the quills of the wings and of the tail are brown, edged with yellow, and the legs reddish-gray.

The most singular fact of the history of the Abyssinian Grosbeak, is the construction of its nest, and the sort of foresight which it discovers, in common with the Toucnam Courvi, and the Baglasecht. The shape of the nest is nearly pyramidal, and the bird is always careful to suspend it over the surface of water from the end of a small branch; the entry is in the side, and commonly faces the east; the cavity is divided by a partition into two compartments; the first is a kind of court into which the bird enters, then creeping along the inclosure, it descends into the second chamber, where its eggs are laid. By means of this complex construction, the eggs are sheltered against the rain, from whatever quarter the wind blows: and we may observe, that in Abyssinia the wet season lasts six months: for it is a general remark, that inconvenience and hardship quicken industry, unless
they

they be so excessive as to extinguish it entirely. In that country the bird was exposed not only to the penetrating rains, but to the attacks of the monkeys, the squirrels, the serpents, &c. It seems to have foreseen the dangers that threaten its family, and to have artfully provided against them. This species is new, and we owe all our information on the subject to Mr. Bruce.

XIX.

The GUIFSO BATITO*.

Loxia Tridactyla, Gmel.

The Three-toed Grosbeak, Lath.

There is no European species to which this foreign bird is more related than the Grosbeak. It shuns inhabited places, and lives retired in the unfrequented forests. It is languid in its amours, and destitute of song; and its only noise almost is made by the strokes of its bill, in piercing the nuts to extract the kernel.—So far the analogy applies. But it differs from the Grosbeak by two remarkable properties; 1st, its bill is indented on the edges; and, 2dly, its feet have only three toes, two before and one

* The full name of this bird, as it is written in Mr. Bruce's drawings, is *Guifso Batito Dimmo Wan Jerck*.

behind, which is an uncommon disposition, and occurs only in a few species. These two discriminating features seem to me so important, that the bird required an appropriated name, and I have preserved that by which it is known in its natal region.

The head, the throat, and the fore-part of the neck, are of a fine red, which extends in a pretty narrow stripe under the body, as far as the lower coverts of the tail. All the rest of the under-part of the body, the upper-part of the neck, the back, and the tail, are black; the upper-coverts of the wings brown, edged with white, the quills of the wings brown, with a greenish border, and the legs of a very dull red. The wings when closed reach not beyond the middle of the tail.

XX.

The SPOTTED GROSBEAK of the Cape of Good Hope.

The bird represented by this name, Fig. 1. No. 639. *Pl. Enl.* though different from the European Grosbeaks in its colours, and the distribution of its spots, appears so much a-kin to that species, that it may be regarded as a variety produced by climate, for which reason we have given it an appropriated name. And Sonnerat

assures us positively that it is the same with that of the first article; and he adds, that these birds appear different, because they change their colours every year.

XXI.

The CRAVATED GRIVELIN.

The bird delineated *Pl. Enl.* No. 659. Fig. 2. under the denomination of the Angola Grosbeak, because we received it from that province of Africa, appears to be related to the *Grivelin*; and as all the neck and the under-part of the throat is covered and encircled by a sort of white cravat, which extends even over the bill, we have given it the name of *the Cravated Grivelin*. We are ignorant of its habits.

The HOUSE SPARROW *.

Le Moineau, Buff.*Fringilla Domestica*, Linn.*Passer Domesticus*, Gefner, Aldrov. Briss. &c.

As the species of Sparrow comprehends a multitude of individuals, so its genus seems at first inspection to include a number of species. One of our nomenclators reckons it to contain no less than sixty-seven different species, and nine varieties, making in all seventy-six birds †; among which we are surprized to find many Linnets, Finches, Green Birds, Canary Birds, Bengal Birds, Senegal Birds, Mayo Birds, Cardinals, Buntings, and many others not related to the Sparrows, and which ought to be distinguished by separate names. To introduce order into this confused group, we shall first remove from the Sparrow, with which we are well acquainted, all the birds just mentioned, which are also sufficiently known to enable us to decide that they do not belong to the same genus. Following then our general plan, we shall consider

* In Greek, Τριγωνίτης. Most translators and naturalists have made it to be Στρεπθος: the fact is, that this last name is generic, and applicable to all the Sparrows: in Italian, *Passera*, or *Passere Casarino*: in Spanish, *Pardal*: in German, *Huss-Spar*, *Haus-Sperling*: in Swedish, *Taalling*, *Gråwparf*.

† Brisson.

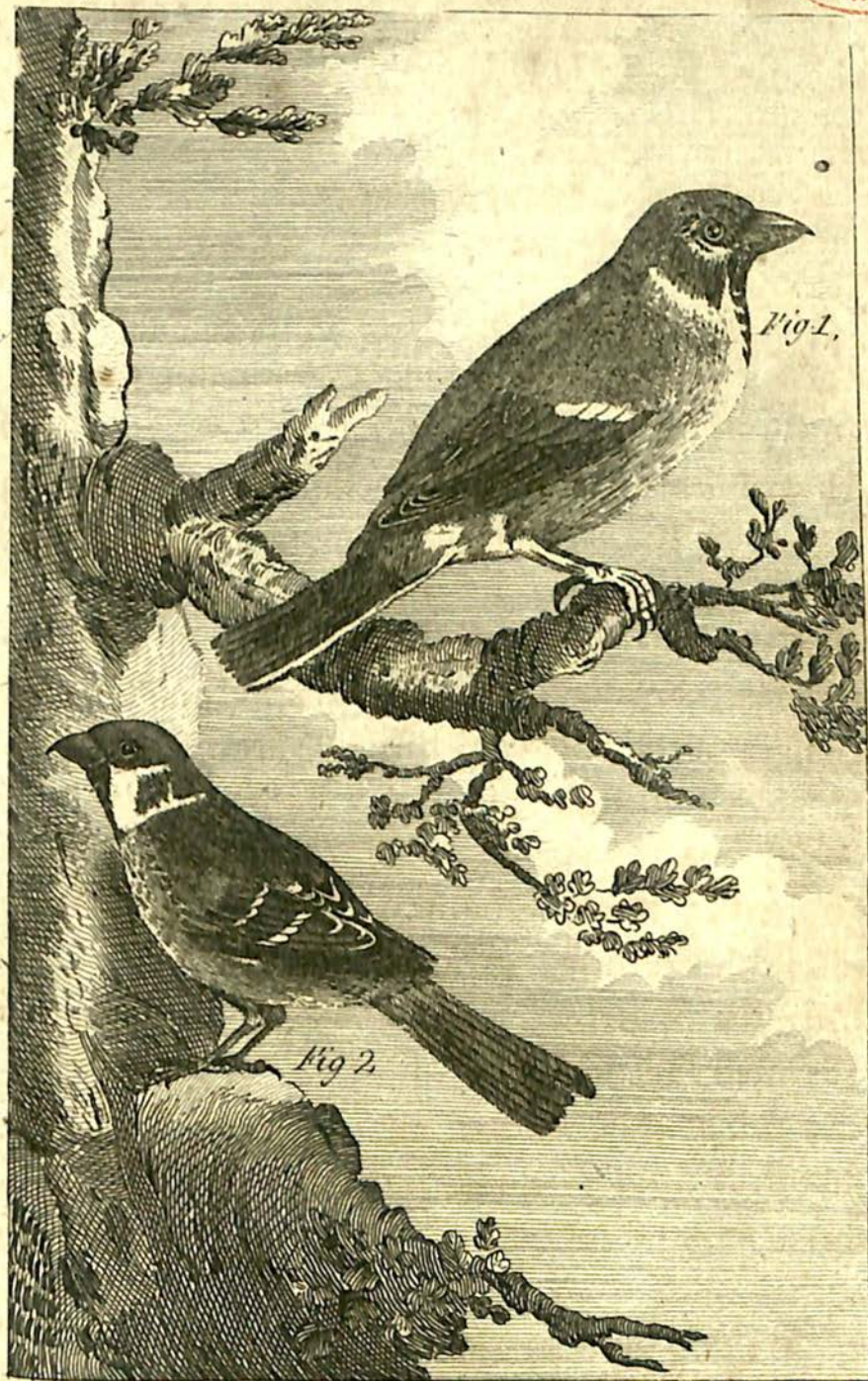


FIG 1 THE SPARROW. FIG 2 THE MOUNTAIN SPARROW.

each of those which inhabit Europe a principal species, and afterwards refer to them the analogous foreign kinds.

We shall also separate from the Common or House Sparrow the *Field Sparrow* and the *Wood Sparrow*; two birds more related than any of the preceding, and also inhabitants of our climate; to each we shall allot a distinct article. This is surely the only way to avoid confusion.

Our Sparrow is too well known to need a description. It is represented Nos. 6 and 55. *Pl. Enl.* fig. 1. No. 6. is the adult male after it has cast its feathers; and fig. 1. No. 55. the young male before moulting. The change of colour in the plumage, and in the angles of the mandibles, is general and uniform; but the same species is subject to accidental varieties; for some House Sparrows are white, others variegated with brown and white, and others almost entirely black*, and others yellow†. The only difference between the females and the males is,

* Black Sparrows occur in Lorraine; but they are undoubtedly the common sort, which as they lodge constantly in the glass-houses, which are frequent along the foot of the mountains, are smoked. Dr. Lottinger, being in one of these glass-houses, observed a flock of common Sparrows, among which were several black ones. An old person, who dwelt on the spot, told him, that they sometimes appeared so much disguised, that they could not be distinguished.

† Aldrovandus.

that the former are smaller, and their colours much fainter.

Besides these first varieties, some of which are general and others individual, and which occur in all the European climates, there are others in more distant regions; which would prove that this species is spread from the north to the south in our continent, from Sweden * to Egypt †, Senegal, &c.

But in whatever country the Sparrow is settled, it never is found in desert places, or at a distance from the residence of man. It likes neither woods nor vast plains. It is more frequent in towns than in villages; nor is it seen in the hamlets or farms that are buried in the depth of forests. It follows society to live at their expence; and indolence and voracity lead it to subsist on the provisions of others. Our granaries, our barns, our court-yards, our pigeon-houses, and, in short, all places where grain is spilt, are its favourite resort. It is extremely destructive; its plumage is entirely useless, its flesh indifferent food, its notes grating to the ear, and its familiarity and petulance disgusting. In some places Sparrows are proscribed ‡, and a price set on their heads.

* Linnaeus.

† Prosper Alpinus.

‡ In many villages of Germany, the peasants are obliged annually to produce a certain number of Sparrows' heads. FRISCH.

But what will render them eternally troublesome and vexatious, is not only their excessive multiplication, but their subtlety, their cunning, and their obstinacy to abide in places which suit them. They are crafty and artful, easily distinguish the snares laid for them, and wear out the patience of those who try to catch them. It is only in seasons of scarcity, and when the snow covers the ground, that the sport will succeed; and little impression can be made on a species which breeds thrice a-year. Their nest consists of hay, lined with feathers. If you destroy it, they will in twenty-four hours build another; if you plunder the eggs, which are five or six*, often more, they will in the course of eight or ten days lay others; if you drive them from the trees or the houses, they will resort in greater numbers to your granaries. Persons who have kept them in cages, assure me, that a single pair of Sparrows consume near twenty pounds of corn annually. We may judge from their numbers what prodigious destruction they must make in our fields; for though they feed their young with insects, and eat many themselves, they principally subsist on our best grain. They follow the labourer in seed-time, and the reaper in harvest. They attend the threshers at the barns, and the poulterer when he scatters grain to his fowls. They visit the pigeon-houses, and even

* Olina says, that they lay sometimes eight, and never fewer than four.

pierce the craw of the young pigeons to extract the food: They eat bees, and are thus disposed to destroy the only insects useful to man. In short, it is much to be wished that some method could be devised for destroying them. I have been told, that if sulphur were smoaked under the trees, where in certain seasons they assemble and sleep at night, they would be suffocated and drop dead. I have tried the experiment, without success, though I took much pains, and was interested in the issue; for I could not get them driven from the neighbourhood of my voleries; and I perceived that they not only disturbed the warbling of my birds, but that by the continual repetition of their harsh cry, *tui, tui*, they sensibly spoiled the song of the Canaries, Siskins, Linnets, &c.

I then placed on a wall, covered with great Indian chesnuts, in which the Sparrows assembled in great numbers in the evening, pots filled with sulphur, mixed with a little charcoal and rosin; and these substances being set on fire, caused a thick smoke, which had no effect but to waken the birds. As the volume ascended, they removed to the tops of the trees, and then retired to the neighbouring houses, but not one dropped. I observed only that they did not for three days visit the trees that were smoaked, but afterwards returned to their former habit.

As these birds are hardy, they can be easily raised in cages, and live several years, especially if

if the females be withheld from them *; for it is said, that their excessive venery abridges the period of their lives. When they are taken young, they are so docile as to obey the voice and catch somewhat of the song of those birds with which they are bred; and being naturally familiar, they become more so in the state of captivity. But when at liberty, they are rather solitary; and hence, perhaps, the origin of their name †. Since they never leave our climate, and are always about our houses, it is easy to perceive that they commonly fly single or in pairs. There are, however, two seasons in the year when they assemble, not to fly in flocks, but to chirp together, in autumn on the willows by the river sides, and in spring on the firs and other evergreens. They meet in the evening, and in mild weather. They spend the night on the trees, but in winter they are found either alone or with their females in a hole of the wall, or beneath the tiles of roofs. And it is only in excessive frosts that five or six are found lying together, probably to keep themselves warm.

* Some suppose that the male Sparrows cannot live longer than a year. The proof is, that none are observed to have a black beard in the spring, but only sometime after, as if none had survived the preceding season. It is alleged that the females are more vivacious; for they are caught along with young ones, and are distinguished by the hardness of their bills.

ARIST. *Hist. Anim.* lib. x. 7.

† Perhaps the French word *Moineau* is derived from the Greek *Μονο-, solus*.

The males fight obstinately for the possession of their females, and in the violence of their struggle, they often fall to the ground. Few birds are so ardent, or so vigorous in their love. They can embrace twenty times in succession with the same fire, the same trepidation, and the same expressions of rapture. What is singular, the female first shews a degree of impatience at a sport which must fatigue her less than the male, but which may also yield her less pleasure, since there are no preludes, no caresses, no adjustment. Much petulance is shewn without tenderness, and a flutter of action which betrays only a selfish appetite. Compare the loves of the Pigeon with those of the Sparrow, and you will perceive almost all the shades from the physical to the moral qualities.

These birds nestle commonly under the tiles, in the lead-gutters, in holes of the wall, in pots that are erected for them, and often about the sides of windows which have Venetian blinds. A few, however, build their nests in trees. I have received some of these which were found in large chesnuts and lofty willows. They place them on the summit of these trees, and construct them with the same materials, *viz.* hay on the outside and feathers within; but what is singular, they add a sort of cap above which covers the nest, so as to prevent the water from penetrating, and leave an opening for entering at under this cap. When they lodge in holes or covered places,

places, they judiciously dispense with this cap. Instinct discovers here a sort of reasoning, and at least implies a comparison of two small ideas. Some House Sparrows, more indolent, though bolder than the rest, do not give themselves the trouble of building, but drive off the Martins, and possess their nests. Sometimes they fight the Pigeons, and establish themselves in the holes.—This little tribe exhibit therefore habits and instincts more varied and perfect than most other birds. This results undoubtedly from their living in society. They enjoy the benefits of the domestic state without surrendering any portion of their independence. Hence that subtlety, that circumspection, and that accommodation of instinct to situations and circumstances. [A]

[A] Specific character of the Common or House Sparrow, *Fringilla Domestica*, LINN.—“The quills of its wings and tail are brown, its body gray and black, with a single white stripe on its wings.” It is near six inches long. The eggs are ash-white, with thick dusky spots. The male is distinguished by his black throat; the female has a duller plumage. They occur throughout Europe, and in Africa and Asia.

FOREIGN BIRDS, RELATED TO THE HOUSE SPARROW.

I.

THE bird, delineated fig. 1. No. 223. *Pl. Enl.* under the name of *Senegal Sparrow*. We shall retain that denomination, since it appears to be of the same species with the Common House Sparrow. The only difference is, that the bill, the top of the head, and the lower-parts of the body, are reddish; whereas, in the European Sparrow, the bill is brown, the crown of the head, and the lower-parts of the body, gray. But in every other respect, they are the same; and we may regard the difference of colour as resulting from the influence of climate.

The bird of which the male and female are in fig. 1. and 2. No. 665. *Pl. Enl.* appears to be only a variety of this.

II.

We may extend these remarks to the bird fig. 2. No. 183. *Pl. Enl.* termed the *Red-billed Senegal*

Senegal Sparrow, which we shall consider, especially since it belongs to the same climate with the preceding, as a variety of it, occasioned by difference of age or sex. ?

III.

The BLACK SPARROW.

There are other foreign birds however, which, though analogous to the House Sparrow, must be regarded as of a different species. Such is the American bird, which the inhabitants of the French West-India islands call *the Black Father*, (*Pere noir*). It is represented fig. 1. No. 201. *Pl. Enl.* It would appear to be settled not only in these islands, but on the continent of South America, as at Mexico; for it is mentioned by Fernandez under the Mexican name of *Yobualtototl*, and described by Sir Hans Sloane as a native of Jamaica*. We suppose also that the two birds, figured No. 224. are only varieties of this. The only thing which weakens this conjecture is, that they were found in climates very distant from each other: 1. from Macao, the 2d from Java, and the 3d from Cayenne. I still conceive, however, that they are varieties of the Black Sparrow; for the climates allotted to them by the importers are not to be considered

* The Black Sparrow marked with saffron dots. SLOANE.

as certain; and besides, this species may occur equally in the hot countries in both continents.

There are others also which may be regarded as varieties of this species. The *Brazil Sparrow*, of which fig. 1. No. 291. *Pl. Enl.* is the male, and fig. 2. the female, resembles the Black Sparrow, so that we cannot hesitate to assign it the same place. The resemblance is indeed the most perfect in the male, for the female differs widely in its colours; but this circumstance only apprizes us of the uncertainty of any classification founded on the plumage.

Lastly, There is another species which we should range with the Black Sparrow, but for the great difference in the length of the tail. This bird is delineated fig. 1. No. 183. *Pl. Enl.* under the name of the *Sparrow of the kingdom of Juida*. We may consider it as a variety of the Black Sparrow, distinguished by its long tail, which consists of unequal quills. If we have been rightly informed with respect to the climates, it would appear that the Black Sparrow is found in the Antilles, in Jamaica, in Mexico, in Cayenne, in Brazil, in the kingdom of Juida, in Abyssinia, in Java, and as far as Macao; that is, in all the tropical countries, both of the New and of the Old Continent.

IV.

The DATE SPARROW*.

Le Dattier, ou Moineau de Datte, Buff.

Fringilla Capsa, Gmel.

The-Capsa Finch, Lath.

Dr. Shaw speaks of this bird in his Travels, under the name of *the Capsa Sparrow*, and Mr. Bruce has shewn me a miniature drawing of it, from which I have made the following description:

The Date Sparrow has a short bill, thick at the base, with some whiskers near the angles of its junction; the upper-mandible is black, the lower yellowish; and also the legs; the nails black, the anterior part of the head and throat white, the rest of the head, the neck, the upper, and even the lower surface of the body, gray, tinged with reddish; but the tint is deepest on the breast†, and on the small upper-coverts of the wings; the quills of the wings and of the tail are black; the tail is slightly forked, pretty

* Mr. Bruce, after having attentively examined this bird, found it to be the same with the Mascalouf of Abyssinia. It is there called also *the Bird of the Cross*, because it usually arrives the day of the Exaltation of the Holy Cross, which denotes the close of the rainy season. Mr. Bruce adds, that at the sources of the Nile a bird appears after the rains which resembles much the Mascalouf, except that it has a much shorter tail.

† Shaw speaks of some reflexions which he perceived on its breast,

long,

long, and stretches two-thirds beyond the extremity of the wings.

This bird flies in flocks; it is familiar, and ventures to pick up grains at barn-doors. In that part of Barbary, south of the kingdom of Tunis, it is as common as the House Sparrow in France; but it sings much better, if what Shaw advances be a fact; that its warble is superior to that of the Canaries and Nightingales*. It is a pity that it is too delicate to be carried out of its native country; at least all the attempts that have hitherto been made of transporting it alive have proved unsuccessful.

* I should have been tempted from the fineness of its notes to range it with the Canaries; but Mr. Bruce, who had often seen it, and to whom I communicated my idea, persisted in his opinion, that it ought to be classed with Sparrows.

The TREE SPARROW*.

Le Friquet, Buff.

Fringilla Montana, Linn. and Gmel.

Passer Montanus, Aldrov. Ray, and Briss.

Passerinus, Gesner.

The Mountain Sparrow, Will.

THIS bird is undoubtedly of a different species from the House Sparrow. Though they inhabit the same climate and the same tracts, they never associate together, and their habits are, for the most part, dissimilar. The House Sparrow never leaves our dwellings, but lodges and breeds in the walls and roofs. The Tree Sparrow seldom visits us, lives in the fields, haunts the sides of the roads, perches on shrubs and low plants, and builds its nest in crevices and holes at a little height from the ground. It is said to nestle also in the woods, and in the hollows of trees; but I have never seen them in the woods but transiently, and they certainly prefer the open fields. The House Sparrow flies heavily, and always to short distances; nor can it walk without hopping and making awkward movements. The Tree Sparrow, on the contrary, whirls round more smartly, and walks better. This species is not so numerous as that

* In German, *Baum Sperling*, *Feld Spatz*, or *Robr Spatz*.

of the House Sparrow ; and it is exceedingly probable that they hatch only once a-year, laying four or five eggs ; for about the end of summer they assemble in great bodies, and remain together during the winter. It is easy in that season to catch them on the bushes where they sit.

After this bird has alighted, it is in a continual flutter, whirling, jerking its tail upwards and downwards, performing all these motions with tolerable grace ; and hence comes its French name *friquet* (*frisky*). Though not so bold as the House Sparrow, it does not shun the presence of man ; it often follows travellers, without shewing any signs of timidity. It flies with a wheeling motion, and always very low ; for it never perches on large trees, and those who have called it the Chestnut Sparrow, have confounded it with the Ring Sparrow, which really lodges on lofty trees and on chestnuts.

This species is subject to variety. Many naturalists have reckoned the Mountain Sparrow *, the Collared Sparrow †, the Foolish Sparrow of the Italians, as specifically different from it. But the Foolish Sparrow is exactly the same

* In German, *Ringel Spatz*, *Ringel Sperling*, *Feld Sperling*, *Wald Sperling* : in Polish, *Wrobel-lesny*, *Wrobel-polny*, *Mazurek*,

† In German, *Berg Sperling* : in Polish, *Wrobel-garny* : in Greek, Σίηθος αγριος.

bird, and the other sorts are only slight varieties*.

What proves that the *Passera Mattugia* †, or Foolish Sparrow of the Italians, is either the Tree Sparrow, or a slight variety of it, distinguished only by the distribution of its colours, is, that Olina, who gives a figure and a description of it, says, that it receives the epithet of *Mattugia*, because it can never rest a single moment in one place ‡; the same circumstance to which I attribute the origin of its French name. Would it not be very singular, that this bird, which is so common in France, should not at all be found in Italy, as our nomenclators have stated? On the contrary, it would seem that there are more varieties of this species in Italy than in France. It inhabits therefore the temperate and warmer regions, and not the cold climates, for it is not found in Sweden. But I am surprized that Salerne should say that this bird occurs not in Germany or England, since the naturalists of these countries have given

* The Mountain Sparrow and Collared Sparrow are the same bird, and differ from the Tree Sparrow only by the white or whitish collar on the top of the neck.

† *Fringilla Stulta*, Gmel. *Passer Stultus*, Briss. *The Foolish Sparrow*, Will. and Lath.

Specific character:—"It is gray-rufous, spotted with footy, below yellowish, its eye-brows and two stripes on its wings white, a yellow spot on its throat, its tail blackish, and at the margin rufous."

‡ *Passer Sylvestris*, Aldrov.

figures and descriptions of it. Frisch even asserts, that the Tree Sparrow and the Canary bird can breed together, and that the experiment has been made in Germany.

The Tree Sparrow, though more restless than the House Sparrow, is not so petulant, so familiar, or so voracious. It is more innocent, and not so destructive to the crops. It prefers fruits, wild seeds, particularly those of the thistle, and also eats insects. It avoids meeting the House Sparrow, which is stronger and more mischievous. It can be raised in a cage, and fed like a Goldfinch; it lives five or six years; its song is very poor, but quite different from the harsh cries of the House Sparrow. Though more gentle than the House Sparrow, it is remarked not to be so docile. This is owing to its living more out of the society of man*.

* Specific character of the Tree or Mountain Sparrow, *Fringilla Montana*:—"The quills of its wings and tail are brown, its body gray and black, with a double white stripe on its wings." Its egg is white blue, with spots of a dull purple crowded at the thick end. It is found in Yorkshire.

FOREIGN BIRDS,

WHICH ARE RELATED TO THE TREE SPARROW.

THE bird called the *Wild Sparrow* (*Passereau Sauvage*) in Provence, appears to be merely a variety of the Tree Sparrow. Its song, says M. Guys, would seem never to end, and is quite different from that of the House Sparrow. He adds, that this bird is very shy, and conceals its head among the stones, leaving its body uncovered, and then fancies itself to be safe. It subsists in the fields upon grain, and some years it is very rare in Provence.

But besides this and other varieties of the same sort that inhabit our climates, and which we have mentioned after our nomenclators by the names of *Mountain Sparrow*, *Collared Sparrow*, *Foolish Sparrow*, there are others found in foreign climates.

I.

The GREEN SPARROW.

Le Passé Vert, Buff.

It is delineated fig. 2., No. 201. *Pl. Enl.* under the name of *Red-headed Cayenne Sparrow*.

We shall term it the *Green Sparrow*, because its body is greenish. But though in point of colour it differs as much as possible from our Tree Sparrow, it is nearer related to this than to any other European bird.

II.

The BLUE SPARROW.

Le Passe Bleu, Buff.

The same may be said of the *Blue Cayenne Sparrow* of fig. 2. No. 203.; and as both these birds inhabit the same climate, we can hardly decide whether they are distinct species, or ought to be ranged in the same.

III.

The F O U D I.

This bird is called in Madagascar, *Foudi Leméné*. Brisson mentioned it first under the name of the *Madagascar Cardinal*. It is delineated fig. 2. No. 134. *Pl. Enl.* by the title of *Madagascar Sparrow*.

There are two birds, the *Cardinal of the Cape of Good Hope*, fig. 2, No. 6. and the Sparrow

row

row of the Cape of Good Hope, fig. 1. No. 134. which both appear to me to be varieties of the Tree Sparrow, the former being the male, and the latter the female; for the only difference is, that the under-part of the body is black; but in all other respects they are alike, and as we have reason to believe that they live in the same climate, we may conclude they belong to the same species.

IV.

The CRESTED TREE SPARROW.

Le Friquet Huppé, Buff.

Fringilla Cristata, Gmel.

The Black-faced Finch, Lath.

It is like the Tree Sparrow in size and shape, though much different in point of colour. It is delineated fig. 1. and 2. No. 181. *Pl. Enl.* under the names of the *Cayenne and Carolina Sparrow*. Fig. 1. is probably the male, and fig. 2. the female of the same species. [A]

[A] Specific character of the *Fringilla Cristata*:—"It is crested with dusky red, the under-side of its body, and its rump, scarlet."

V.

The BEAUTIFUL MARKED SPARROW.

Le Beau Marquet, Buff.

It is delineated fig. 1. No. 203. *Pl. Enl.* under the appellation of *Sparrow of the Coast of Africa*. It is certainly different from the Tree Sparrow, and all those which we have mentioned, and therefore required an appropriated name. That which we have formed denotes that it is beautiful, and finely spotted under the belly.



FIG. 1. THE RING SPARROW. FIG. 2 THE GRIVELIN.

The RING SPARROW*.

Le Sculcie, Buff.

Fringilla Petronia, Linn. and Gmel.

Passer Sylvestris, Briss.

Passer Torquatus, Aldrov. and Ray.

THIS bird has, as well as the Tree Sparrow, been often confounded with the House Sparrow, though it is of a different species. It is larger than either, its bill is stronger, and red rather than black, and it has no habit in common with the House Sparrow. It dwells in the woods, and hence the name that it has received from most of the naturalists †. It nestles in hollow trees, lays four or five eggs, and hatches only once a-year. As soon as the young are able to accompany the parents, that is about the end of July, they associate in flocks. The Ring Sparrows are therefore collected six weeks earlier than the Tree Sparrows, and form also more numerous bodies. They remain united till the season of love, when they separate with their females in pairs. Though these birds are invariably stationary in our climate, it is probable that they dread the severity of the arctic region, for Linnæus makes no mention of them in his enumeration of the natives of Sweden. They

* In Italian, *Passarà Alpestre*.

† *Passer Sylvestris*:
are

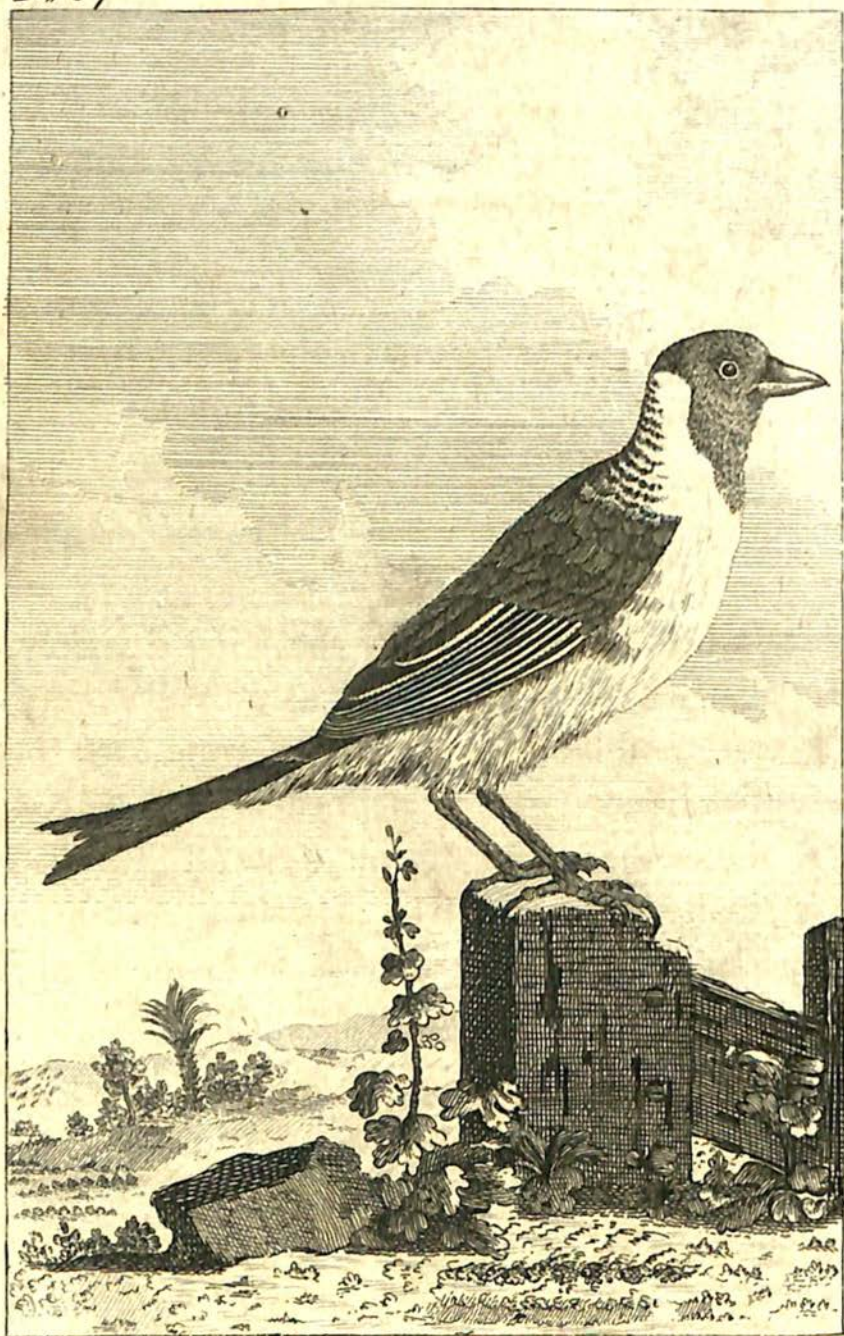
are birds of passage in Germany *, and do not arrive in flocks, but only one by one †; and what seems to confirm our conjecture, they are often found dead in the hollows of trees, in hard winters. They subsist not only on grain and seeds of all sorts, but also on flies and other insects. They are fond of the society of their equals, and when they discover abundance of food, they invite them to partake. As they are almost always in numerous bodies, they do vast injury to newly-sowed fields. They can scarcely be driven away or destroyed, for they partake of the caution of the House Sparrow. They avoid snares, lime-twigs, and traps, but they can be caught in great numbers with nooses ‡.

* This bird was hitherto scarcely, if at all, known in Germany; but of late years it has become very common.—*Note communicated by* LOTTINGER.

† Frisch.

‡ Specific character of the *Fringilla Petronia*:—"It is gray, "its eye-brows white, the upper-part of its throat yellow." Its egg is dusky, with white dots.

N^o 87



THE PAROARE.

FOREIGN BIRDS, THAT ARE RELATED TO THE RING SPARROW.

I.

The LITTLE RING SPARROW.

Le Soulciet, Buff.

Fringilla Monticola, Gmel.

Passer Canadensis, Briss.

The Mountain Finch, Lath.

THIS bird is so much like the Ring Sparrow, that we might consider it as only a variety, if it were possible that it could migrate into the New Continent. It is delineated fig. 2. No. 223. under the name of the *Canada Sparrow*. It is smaller than the Ring Sparrow, as all the American animals are inferior to those of the same species in the Old World*.

* Specific character :—" It is brown, white below, its top variegated with gray-bay; its temples, its neck, and two stripes on its wings, white."

II.

The P A R O A R E

Is another beautiful bird, a native of South America. Marcgrave calls it by its Brazilian

name, *tijé guacu paroara*, from which we have taken the term *Paroare*. Brisson has named it the *Dominican Cardinal*, because its head is red, and its body black and white. In the female, the fore-part of the head is not red, but yellow-orange, sprinkled with reddish points.

We shall also apply the name of *Crested Paroare* to a bird of the same continent, which appears to be only a variety, distinguished by a tuft or crest on its head. This beautiful bird is figured No. 103. *Pl. Enl.* and there termed the *Crested Dominican Cardinal of Louisiana*.

III.

The CRESCENT.

Le Croissant, Buff.

This bird is delineated fig. 1. No. 230. *Pl. Enl.* and there named the *Sparrow of the Cape of Good Hope*, which had been given to it by Brisson. We shall term it the *Crescent*, because in its species and climate it is different from the others. In the distribution of its colours it is analogous to the Ring Sparrow, and has a white crescent which extends from the eye below the neck.—This character is alone sufficient to distinguish it.



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